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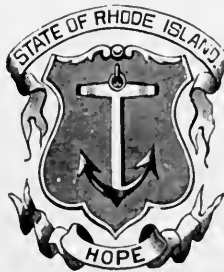






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TWENTY-FIFTH ANNUAL REPORT
OF THE
STATE BOARD OF HEALTH,
OF THE
STATE OF RHODE ISLAND,
FOR
THE YEAR ENDING DECEMBER 31, 1902.
AND INCLUDING
THE REPORT UPON THE REGISTRATION OF
BIRTHS, MARRIAGES, AND DEATHS IN 1901.



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1910.

MEMBERS

OF THE

RHODE ISLAND STATE BOARD OF HEALTH

Post Office Address.

ALBERT G. SPRAGUE, M. D., *President*.....RIVER POINT.....KENT COUNTY,
SAMUEL M. GRAY C. E.....PROVIDENCE.....PROVIDENCE COUNTY.
JOHN C. BUDLONG, M. D.....PROVIDENCE.....PROVIDENCE COUNTY.
REV. GEORGE L. LOCKE.....BRISTOL.....BRISTOL COUNTY.
ALEXANDER B. BRIGGS, M. D.....ASHAWAY.....WASHINGTON COUNTY.
RUFUS E. DARRAH, M. D.....NEWPORT.....NEWPORT COUNTY.
GARDNER T. SWARTS, M. D.....PROVIDENCE.....PROVIDENCE COUNTY.

GARDNER T. SWARTS, *Secretary.*

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To the Honorable the General Assembly:

In compliance with the General Laws, the Annual Report of the State Board of Health is hereby respectfully submitted.

GARDNER T. SWARTS,

Secretary.

GENERAL REPORT.

The work of the State Board of Health during the year has been a continuation of the study of the various conditions pertaining to the public health, especial use being made of the more recent methods of diagnosis and investigation which have been made available during the past few years.

CONTAGIOUS DISEASES.

From the monthly reports of communicable diseases made by the local health officers of the various towns it appears that the usual amount of scarlet fever, diphtheria, and typhoid fever has prevailed. The unusual prevalence of small-pox during the previous year was continued in epidemic form into the present year. A large number of towns were visited by this disease, an overwhelming number of cases occurring in the city of Woonsocket.

WATER SUPPLIES.

There have been no changes in the system of water supplies of the State since the issuance of the previous report.

After many years of discussion and deliberation by numerous committees appointed by the city council of Providence, the requirement of purification of the city water supply has received attention.

Recommendations by these different committees were the advisement of an installation of a mechanical or a sand filtration process for purifying the water supply. The recommendation of the last committee was the adoption of the mechanical form of filtration,

for the reason that it was more economical in first cost and more readily under control. The system involves the use of a chemical precipitant, usually sulphate of alumina. Owing to the ungrounded fears of certain physicians in the city that the alum used might be dangerous or detrimental to the consumers, public sentiment was brought to antagonize this method. The objections were not supported by any data or facts in reference to the use of the alum as a coagulant. On the other hand the committee had obtained information from many localities where this system had been in use, but no suspicion even that the use of alum was deleterious to the public health, or that its use had been found objectionable in the production of steam in manufacturing plants, had arisen.

The fact that the alum that was used was retained upon the surface of the filter in chemical union with the organic matter present, and that it could not in that form get through the sand used for filtering, was ignored. The fact that something was added to the water, although that something was what might be found in many of the purest supplies from driven wells, was sufficient. Chemistry and scientific facts that are usually of influence in forming an opinion by professional and educated men had no standing. Prejudice was sufficient, and prevailed.

After the report of this committee the subject was allowed to rest until a new committee of the city council recommended plain sand filtration, and in July of this year a contract was made to build a slow sand filtration plant at the Pettaconsett Station, which is the intake of the Pawtuxet river water supply of the city of Providence.

The plant was to consist of six beds of one acre each, and to be located on low ground on the opposite side of the river from the pumping station, the raw water to be raised about seven feet from the ordinary level of the river, the filtered water then to be pumped to the Sockanosset reservoir for pressure and distribution to the city.

No provision was made for covering these sand beds, the com-

mittee or engineer in charge possibly depending upon the opinion of a noted sanitary engineer who reported to one of the filtration committees as follows:

"It has been suggested that covers will be necessary or desirable for filters at Providence. Covers certainly are not indispensable, as is shown by the experience of Lawrence, Poughkeepsie, and Hudson, all filtering river waters, and all with the average winter temperatures lower than at Providence. It is true that difficulty with ice has been experienced at all of these places, and that covers have been recommended at two of them. The difficulties have had the effect rather of increasing the cost of operation than of decreasing the efficiency of the filters, although there has been some decrease in efficiency. Open filters with reservoir water at Ilion, N. Y., have also been operated without difficulty.

"In the vicinity of New York City open filters are perfectly satisfactory and covers are unnecessary. Providence is probably nearer in temperature to New York City than to Lawrence and Poughkeepsie, and it is thus a fair question whether covers would be necessary for Providence."

It may have also been the judgment of the committee and its engineer that shallow water will not freeze during the winter months in the southern part of New England. Future experience may develop the solution of this question.

The report of the city engineer states that since the placing of the contract in July some grubbing has been done, embankments built, sand being cleaned, and that it is anticipated that by the following spring the work will be well under way.

It is to be regretted that Providence has been so long in deciding to avoid the possible danger arising from the use of unfiltered Pawtuxet water, and it is to be hoped that the installation of the filter plant will be rapidly forced to completion.

The city of Pawtucket continues supervision and inspection of its water shed. The so-called filter or strainer intended to purify the water supply is still in operation at the pumping station.

The town of Bristol is still being supplied by a highly colored

water, at times saturated with chlorine owing to the influx of sea water at high tides. The water shed receives no periodical inspection, cattle and horses wade in the reservoirs, and fishing is allowed on the banks and from boats.

While pollution to the point of danger may not occur, the possibility is present. Litigation before a master has resulted in many hearings and decisions, but seemingly not to the satisfaction of either the present proprietors or to the town, which has elected to purchase the whole system, but can not agree as to a valuation.

The supplies in the Pawtuxet Valley continue to hold their good qualities; and the supply of Westerly, taken from a driven well, continues to be one of the best waters in the State.

Woonsocket, having possession of a large part of its water shed, and having certain legal authority to prevent pollution of its reservoirs and streams, is in a somewhat safer condition than most of the other supplies in the State. Its high color and vegetable taste suggest that at some future period the city will see its way clear to make the supply a more palatable one by means of filtration.

EXAMINATION OF WATER SUPPLIES.

Monthly, and in some cases bi-monthly, analyses of all the public water supplies of the State have been made, and the resulting data is proving the foundation of most valuable information for future reference and judgment. If an epidemic occurs the condition of the water for previous years compared with most recent examinations will show if the supply is below its standard and if open to suspicion. If it has not changed in character suspicion thereon may be eliminated in a measure and other sources of infection may be the sooner sought for.

In case that any of the poorer supplies should be brought under consideration for purification, a glance at the results of the repeated examinations would show at once what treatment would be required for purification, and if actual danger was present the consumers could be at once warned to use the supply only after boiling.

EXAMINATION OF SEWAGES.

The monthly examinations of the sewage matter thrown out from certain cities have been instructive, and serve as a value to those towns which are endeavoring to purify their sewage before delivering into the streams near by.

The purification has been accomplished in different ways by different cities. A means of treatment in one case might call for other treatment in another.

The chemical precipitation plant of the city of Providence is now in regular working order, and the Providence river and Narragansett Bay do not receive the heavy sewage of former years. While the percentage of purification is only about fifty, yet the difference shows a marked change in the appearance of the river water and the adjacent shores.

The process of septic tank treatment used by the city of Pawtucket in conjunction with sand filtration has shown some excellent results, the effluent or purified sewage coming from the filters quite clear and with a purification of about 90 per cent. This clear effluent is discharged into the dark and grossly polluted Moshassuck river, and serves in a small measure to dilute this noisome stream, which, with the Woonasquacket river, gives off the offensive odors found at the bridges in the center of the city of Providence.

Central Falls, utilizing the same system as Pawtucket, delivers a clear filtered sewage into a small trench which in turn delivers into the Moshassuck river.

The city of Woonsocket, also with considerable sanitary forethought, also treats its sewage. The process of filtration is by means of sand filtration only. The weak composition of the sewage does not call for preliminary sedimentation and septic action before filtering.

The clear discharge is delivered into the Blackstone river, which has already received a considerable amount of pollution from the

many towns and manufactories above, as well as the partially treated Worcester sewage.

The operations of these four cities in the endeavor to avoid increasing pollution of streams is most commendable, and is a striking lesson to the careless indifference of the many manufactories which unhesitatingly deliver their crude wastes into the streams near by until they become offensive to the eye and to the sense of smell, and, while not being strictly dangerous to health by the production of specific disease, yet constitute a distinct nuisance of a character sufficiently offensive to demand correction.

EXAMINATION OF SPUTUM FROM CASES OF SUSPECTED TUBERCULOSIS.

The assistance afforded physicians in making a diagnosis of tuberculosis or pulmonary consumption in cases of doubt, and in corroborating a diagnosis already made, by an examination for tubercle bacilli in the sputum of the suspected cases has caused the board to continue its work along these lines.

This work was commenced in 1894, and has never been discontinued. It not only serves the physician, but it assists the board and the student of tuberculous disease in judging the prevalence of the disease. It is a protection to the public by teaching the patient the presence of the disease and its causation. It is a means for influencing him to care for his expectorations and to avoid infecting his relatives and the public. Often the fact of an examination of the sputum by the board, and the presence of tubercle bacilli being established, is the only influence which leads him to change his habits.

In connection with these examinations a card catalogue of the names of the patients and the results is kept. Also a card catalogue is maintained giving the deaths from tuberculosis. These two are filed together and offer a means of study of this disease which can not be obtained in any other way.

The record of deaths kept in this way is complete from 1890. It is recorded not only by name but by residence.

EXAMINATION OF CULTURES IN CASES OF SUSPECTED DIPHTHERIA.

This means of determining the presence or absence of diphtheria in distinction from a tonsillitis, or sore throat, is now utilized by nearly all the physicians in practice.

Its service is daily demonstrated by giving the physician an immediate positive determination that the disease is present. He thus early in the disease is prepared to treat it intelligently. Ofttimes it is the only means of diagnosis, the accompanying symptoms not being sufficiently distinct. Learning early that the disease is present permits of an immediate report of the case to the local health department, which in turn may immediately place the case in quarantine and instruct the relatives of the patient in methods to prevent the extension of the disease to others.

Assurance of the presence of the disease warrants the physician in expending money for the specific antitoxin in diphtheria.

In cases where the patient and his family are too poor to purchase this expensive specific remedy, the State Board of Health is prepared to supply it in any quantity necessary, in any part of the State. This is made possible by the liberal appropriations made by the legislature at its various sessions, and has been in practice ever since diphtheria antitoxin has been available.

EXAMINATION OF SPECIMENS OF BLOOD IN CASES OF SUSPECTED TYPHOID FEVER.

This work, which is accomplished by means of examining a drop of blood taken from the patients for certain bacteriological reactions, and called the Widal reaction, was commenced in 1900. Its continued and increased use by physicians has shown its value as a diagnostic point in determining the presence of typhoid fever.

The results of the examination of sputum, diphtheria cultures and blood will be found in the latter part of this report.

APPROPRIATIONS.

An annual appropriation of \$6,000 was made, at the January session of the legislature, for a continuance of the work of the board. The increase in the amount from that appropriated three years previous was made necessary in order to carry out the work of the chemical laboratory and to make it possible for the board to make certain experimental research in connection with the workings of several sewage disposal plants being operated by cities and towns.

The data acquired from the latter study are of value in determining, for other cities and towns and for manufacturing plants, the most advisable means of disposing of sewage and manufacturing wastes.

A special appropriation of \$1,000 was made by the legislature for the special use of investigation and prevention of diphtheria. A like appropriation for the examination of sputum and study of tuberculosis was also made.

PERSONNEL OF THE BOARD.

The term of membership of Dr. Rufus E. Darrah, member of the board from Newport county, expired by limitation January 31, 1902.

Governor Charles D. Kimball, at the January session of the General Assembly, with the advice and consent of the Senate, re-appointed Dr. Darrah for a term of six years from January 31, 1902.

SECRETARY'S REPORT.

TOWN SANITATION.

1902.

REPORTS FROM TOWNS,

IN RELATION TO SANITARY IMPROVEMENTS, ETC.

It has been observed, in the previous issues, that a complete annual report of a State Board of Health properly includes an account of the measures taken each year by the municipal authorities, corporations, or individuals for the promotion of the health of the communities under their respective supervision or control. In order, therefore, to ascertain the facts in relation to such measures, and for the purpose of presentation in this report as in the reports heretofore issued, and in the continuance of the design to keep well informed of all proceedings throughout the State on the part of town or city councils or any form of municipal authority in the appointment of health officers or boards of health, and in the direction of improvements which have in view and seem to promise the promotion of public health by the abatement of nuisances or the removal of unsanitary conditions and surroundings, or by the introduction of water for general use, or construction of sewers, or the establishment of other public works which may not only be of great public utility and convenience but also serve in some measure, large or small, in the prevention of disease, the secretary has, as heretofore, solicited replies from the town and city clerks of the several towns and cities, or other municipal officers, in answer to questions proposed in a circular sent for that purpose.

It is designed and hoped that a connected history may thereby be secured of all sanitary improvements of a public character in all parts of the State, from year to year; and the gradual awakening of the citizens of the different towns to the necessity of sanitary

public measures thereby be shown; and also whatever intelligent appreciation of such necessity, and whatever public spirit in existence in the towns there may be, may be known as manifested by the readiness with which needed sanitary measures are adopted.

The following is the form of circular sent at close of the year 1902:

CIRCULAR No. 130.

OFFICE OF SECRETARY OF STATE BOARD OF HEALTH,

PROVIDENCE, R. I., Jan. 1, 1903.

To the Town Clerk:

It is, by statute law, made the duty of the secretary of the State Board of Health to make inquiries of town or city clerks, or of the clerks of local boards of health, in regard to the general health and sanitary condition of the towns, and also in regard to measures taken for the improvement of the same, as may be seen by the following section from the

PUBLIC STATUTES, CHAPTER 83.

SEC. 6. The secretary of the said board shall make inquiry, from time to time, of the clerks of town and local boards of health, and practicing physicians, in relation to the prevalence of any disease, or knowledge of any known or generally believed source of disease, or causes of general ill-health, and also in relation to the proceedings of the said boards of health in respect to acts for the promotion and protection of the public health, and also in relation to diseases among domestic animals, in their several towns and localities, respectively; and the said clerks of town and local boards of health and said practicing physicians shall give such information in reply to said inquiries, of such facts and circumstances as have come to their knowledge.

In order to make complete the annual report of this board to the General Assembly, the secretary would respectfully ask your co-operation by answers to the following questions:

1. Has any work for the promotion of public health been contemplated or completed in your town by the town authorities, or by private enterprise, during the year? If any, please state what.

2. If by introduction or extension of water service for general use, please state what proportion of the population, by estimation, was supplied with the same at the end of the year.*

3. If city or town has sewage system, state the aggregate length of sewers, by estimation or otherwise, and about what proportion of the population has drainage connected with them at the end of the year.*

4. If by new ordinances in abatement of nuisances, or for any sanitary purpose, please send copy of same; also state how far, to your best knowledge, all the sanitary ordinances have been enforced. Copies of town ordinances especially desired.

5. Has your town any legal board of health beside the town council? If so, please give the names of the officers of the same.

6. Please give the names of the health officers of your town.

7. Has gratuitous vaccination been provided in your town during the past year? What proportion of the population was vaccinated, according to your best knowledge?

8. Have undertakers promptly sent in their returns of death? Please give names of any who do not. (See Public Statutes, Chap. 85, Sec. 1.)

9. Do clergymen make returns of marriages promptly each month, as required by Public Statutes, Chap. 85, Sec. 4.

Thanking you in advance for your assistance, I am,

Yours truly,

GARDNER T. SWARTS,

Secretary.

N. B.—The town or other clerk should charge a remunerative fee for replying to the above circular, and present to the town council or board of health, it being a service required by law.

BRISTOL COUNTY.

BARRINGTON.

1. Nothing for the promotion of the public health has been done during the year.

3. This town has no sewage system.

4. No new sanitary ordinances have been enacted during the year. (See contagious disease ordinance, report of 1897, p. 10.)

* If not known by the person replying, please state where or of whom such information may be obtained.

5. This town has no legal board of health other than the town council.
6. Samuel F. Bowden, health officer.
7. Gratuitous vaccination has been provided for school children. Practically all the school children of this town have been vaccinated.
8. Undertakers have promptly made returns of deaths. Any delays which occur are generally due to physicians.
9. Clergymen make returns of marriages promptly.

FREDERICK P. CHURCH, *Town Clerk.*

BRISTOL.

1. Nothing especial for the promotion of the public health has been contemplated during the year.
2. About seven-eighths of the inhabitants of this town are supplied by the water service.
3. The aggregate length of sewers of this town is about eight miles and about one-eighth of the inhabitants are connected therewith. One system is still in the hands of the contractor.
4. No new sanitary ordinances have been adopted during the year. The present ones are very well enforced.
5. This town has no legal board of health other than the town council.
6. Everett Le B. Church, health officer.
7. Gratuitous vaccination has been provided during the year.
8. In all instances undertakers have been prompt in making returns of death.
9. Clergymen have promptly made returns of marriages.

HERBERT F. BENNETT, *Town Clerk.*

WARREN.

1. Nothing special for the promotion of the public health has been done during the year.
3. About 150 feet of sewers have been laid during the year.
4. No new sanitary ordinances have been enacted during the year.
5. This town has no legal board of health other than the town council.
6. George L. Drown, health officer.

7. Gratuitous vaccination has been provided during the year. About 9-40 of the inhabitants availed themselves of the same.

8. Undertakers have promptly made returns of deaths.

9. Most of the clergymen make returns of marriages promptly.

CHARLES B. MASON, *Town Clerk.*

KENT COUNTY.

COVENTRY.

1. Nothing for the promotion of the public health has been done during the year.

5. This town has no legal board of health other than the town council.

6. John Winsor, M. D., health officer.

7. Gratuitous vaccination was not provided during the year.

8. Undertakers have promptly made returns of deaths.

9. Clergymen make returns of marriages promptly.

GEORGE B. PARKER, *Town Clerk.*

EAST GREENWICH.

1. Nothing for the promotion of the public health has been done during the year.

2. There are about 500 water taps in town, and about 66 per cent. of the population is supplied with water.

3. The aggregate length of sewers of this town is 6,335 feet. This affords drainage to 125 estates, 75 per cent. of which have connections made. The population of the area drained is between 600 and 700.

4. No new sanitary ordinances have been enacted during the year. According to the reports made by the health officer to the town council, the present ones have been generally observed. (See health ordinances, report of 1894, p. 27; and 1900, p. 15.)

5. This town has no legal board of health other than the town council.

6. Elbridge G. Carpenter, M. D., health officer.

7. Gratuitous vaccination was provided during the year, but, owing to the

fact that the reports of vaccinations have not as yet been filed by the physicians, the number so vaccinated is not available.

8. Undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

GEORGE A. LOOMIS, *Town Clerk.*

WEST GREENWICH.

1. Nothing for the promotion of the public health has been done during the year.
2. This town has no public water service.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year.
5. This town has no legal board of health other than the town council.
6. This town has no health officer.
7. Gratuitous vaccination was not provided during the year.
8. As far as is known, clergymen have promptly made returns of deaths.
9. As far as is known, clergymen make returns of marriages promptly.

OTHO TARBOX, *Town Clerk.*

WARWICK.

1. Nothing for the promotion of the public health has been done during the year.
4. (Contagious disease ordinances, see report of 1893, p. 45.)
5. This town has no legal board of health other than the town council.
6. Albert G. Sprague, M. D., health officer.
8. Undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

JAMES T. LOCKWOOD, *Town Clerk.*

NEWPORT COUNTY.

JAMESTOWN.

2. About two-thirds of the inhabitants of this town are supplied by the public water service.
3. The length of sewers in this town is about four and three quarters miles, and about two thirds of the population has drainage connected therewith.

4. No new sanitary ordinances, except that one to prevent foot and mouth disease among cattle, have been enacted during the year. The present laws are fairly well enforced. (Health laws, see report of 1893, p. 46; also 1894, p. 29; 1900, p. 16.)

5. This town has no legal board of health other than the town council.
6. Gideon Latham, health officer.
7. Gratuitous vaccination was not provided during the year.
8. Undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

WILLIAM F. CASWELL, *Town Clerk.*

LITTLE COMPTON.

1. Nothing for the promotion of the public health has been done during the year.

2. This town has no public water service.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year. (Contagious disease ordinances, see report of 1898, p. 16.)
5. This town has no legal board of health other than the town council.
6. John G. Hathaway, M. D., health officer.
7. Gratuitous vaccination was provided during the year, and about one eighth of the population was so vaccinated.
8. Undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

JOHN B. TAYLOR, *Town Clerk.*

MIDDLETOWN.

1. There was no special undertaking, looking to the promotion of the public health, during the year. Ordinary precautions to remove sources of disease and prevent the spread thereof were taken.

2. During the year there was no material increase in the number of persons taking water from the mains of the Newport Water Co.

3. No sewage system has ever been established in this town.
4. (Contagious disease ordinances, see report of 1893, p. 48.)

AN ORDINANCE IN RELATION TO THE DRIVING OR TRANSPORTING OF NEAT CATTLE AND OTHER ANIMALS INTO THE TOWN OF MIDDLETOWN.

(Passed December 2, 1902.)

It is Ordained by the Town Council of the Town of Middletown as follows, to wit:

SECTION 1. No person or company shall hereafter within sixty days from the first day of December, 1902, drive or transport into the town of Middletown any neat cattle, swine, sheep, or other ruminant animal which was brought to or placed on the Island of Rhode Island since the first day of November last past 1902, or which may be brought to or placed on said Island at any time subsequent to the passage of this ordinance, nor any of the before described animals which were brought or placed on said Island at any time previous to said first day of November, 1902, which are infected or suspected of being infected with any contagious or infectious disease, without permission first had and obtained of the cattle commission hereinafter created and provided for.

SEC. 2. Any person or company violating the provisions of the first section of this ordinance shall be fined twenty dollars for every such violation, to be recovered by complaint and warrant, before any court of competent jurisdiction, to the use of said town.

SEC. 3. It shall be the duty of the aforesaid cattle commission, at the proper expense of said town, to complain of and prosecute to final judgment all violations of this ordinance.

SEC. 4. Harvey F. Copeland, Clark Henry Congdon, and William L. Coggeshall are hereby appointed and constituted a cattle commission to receive and consider all applications for bringing and transporting into this town any neat cattle, swine, sheep, or other ruminant animal; to employ, at the proper expense of this town, any veterinary physician or qualified person, to examine and determine whether any of the before-mentioned animals are infected, or liable to be infected, with any infectious or contagious disease, and to grant permission, if deemed safe and proper, for their admission into the limits of this town. Said commission is hereby authorized and directed, to co-operate with and act in conjunction with the State Board of Agriculture, its officers and agents, in any measures taken by said board for the suppression and eradication of any diseases which may originate and attack any domestic animals within the limits of this town.

SEC. 5. This ordinance shall take effect from and after December 4, 1902.

5. The town council constitutes the only board of health in this town.

6. George E. Ward, health officer.
7. Gratuitous vaccination was not provided during the year.
8. For the most part, undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

ALBERT L. CHASE, *Town Clerk.*

NEWPORT.

1. Nothing for the promotion of the public health has been done during the year.
3. There are about 65 miles of sewers in this city, and about 70 per cent. of the population is connected with the same.
4. All sanitary ordinances are very well enforced.
5. A board of health for this city was created this year by the General Assembly.
6. The members of aforesaid board are as follows: Rufus E. Darrah, M. D., president; Samuel P. Cottrell, M. D., secretary; Christopher F. Barker, M. D., Robert Frame and Charles E. Lawton. The health officers are Joseph W. Sampson, executive officer; Robert L. Oman, sanitary inspector; George C. Shaw, assistant inspector; and Cornelius C. Moore, clerk.
7. Gratuitous vaccination was not provided during the year.
8. Undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

DAVID STEVENS, *City Clerk.*

NEW SHOREHAM.

1. Nothing for the promotion of the public health has been done during the year.
6. Hamilton A. Mott, health officer.
7. Gratuitous vaccination was not provided during the year.
8. As far as is known, undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

EDWARD P. CHAMPLIN, *Town Clerk.*

PORTSMOUTH.

No reply from the town clerk.

TIVERTON.

1. Nothing for the promotion of the public health has been done during the year.
2. This town has no public water service.
3. This town has no sewage system,
4. No new sanitary ordinances have been enacted during the year. (Contagious disease ordinances, see report of 1900, p. 19.)
5. This town has no legal board of health other than the town council.
6. Edward P. Stimson, M. D., health officer.
7. Gratuitous vaccination was provided during the year, but, owing to the fact that about everybody in town was vaccinated three or four years ago, few availed themselves of it.
8. Undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

A. LINCOLN HAMBLY, *Town Clerk.*

PROVIDENCE COUNTY.

BURRILLVILLE.

1. Sharp watch has been kept by the town council and health officers over drains, cess-pools, and other menaces to public health.
2. The Pascoag Water Company commenced work of construction of a system of public water works for the compact section of the town on December 18th of this year, but little progress has been made as yet.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year, but to the best of my knowledge the present ones are satisfactorily enforced. (Contagious disease ordinances, see report of 1897, p. 20.)
5. This town has no legal board of health other than the town council.
6. John W. Clavin, health officer.
7. Gratuitous vaccination was not provided during the year, as most of the people were so vaccinated during the previous year.

8. Undertakers have been fairly prompt in making returns of deaths.
9. Clergyman make returns of marriages promptly.

EDGAR A. MATHEWSON, *Town Clerk.*

CENTRAL FALLS.

1. Nothing for the promotion of the public health has been done during the year.
2. About 92 per cent. of the inhabitants of this city are supplied by the public water service of this city.
3. There are 10.011 miles of sewers in this city. This affords drainage to about 48 per cent. of the inhabitants.

SEWAGE FILTER BEDS.

Considerable work was done toward constructing additional sand filter beds. 24,240 cubic yards of sand were excavated and filled in the swamp and all the necessary pipe purchased. Owing to the settlement of sand it will require additional filling early in the coming year. The sand filling, with an average haul of 400 feet, was done for about 14 cents per cubic yard. It will require considerable more filling, and the laying of 2,000 feet of tile underdrains and 1,000 feet of pipe carriers, to complete the work. The sewage was also connected from Lonsdale avenue with the tanks, by a pipe line laid through the hillside a distance of about 1,000 feet.

During the year 40 permits were issued and 41 houses were connected with sewers in the western district, making the total number of connections 257, which drains 284 houses.

Number of persons benefited this year.....	425
Number of persons benefited January 1, 1902.....	2,726
<hr/>	
Total number of persons benefited Nov. 30, 1902.....	3,151

The total amount of sewage treated during the year was 14,670,800 gallons against 14,898,508 gallons for 1901. Monthly comparisons between the years 1900 and 1902 are given below:

Date.	Number of Gallons.	Date.	Number of Gallons.
December 1899.....	909,942.	December 1901.....	1,262,700.
January 1900.....	800,000.	January 1902.....	1,091,000.
February 1900.....	523,318.	February 1902.....	1,029,600.

Date.	Number of Gallons.	Date.	Number of Gallons.
March 1900.....	993,424.	March 1902.....	1,213,000.
April 1900.....	850,435.	April 1902.....	1,253,300.
May 1900.....	884,890.	May 1902.....	1,324,500.
June 1900.....	818,650.	June 1902.....	1,228,500.
July 1900.....	1,048,360.	July 1902.....	1,260,600.
August 1900.....	975,154.	August 1902.....	1,412,000.
September 1900.....	1,067,200.	September 1902.....	1,129,000.
October 1900.....	1,044,000.	October 1902.....	1,216,700.
November 1900.....	1,044,000.	November 1902.....	1,249,900.
<hr/>		<hr/>	
10,959,373.		14,670,800.	

The relation between the monthly average temperatures of the air, the average temperature of the sewage, the maximum and minimum temperature of the air in degrees Fahrenheit, are given below:

Month.	Max. Air.	Min. Air.	Av. Air.	Av. Sewage.
December 1901.....	60°	11°	31°	46°
January 1902.....	52°	8°	28°	46°
February 1902.....	43°	12°	28°	44°
March 1902.....	65°	19°	41°	51°
April 1902.....	74°	33°	47°	56°
May 1902.....	90°	36°	58°	55°
June 1902.....	91°	46°	64°	61°
July 1902.....	91°	51°	68°	65°
August 1902.....	88°	50°	67°	64°
September 1902.....	87°	45°	62°	64°
October 1902.....	73°	28°	54°	61°
November 1902.....	70°	26°	46°	57°

Although the total sewage flow this year did not show an increase over last year, the sewage was stronger this year and was probably not so much diluted with rain water, because with slow, drizzling rains, more or less water flows into the tanks before the automatic regulating apparatus shuts off the storm flow, and this year the storms have had heavy rainfalls; however, the analyses show the sewage stronger this year than last.

During the summer months the effluent from the beds is excellent, but in the colder weather the degree of purification is greatly reduced. Daily measurements taken to obtain the flowage of the stream running from the swamp, into which the effluent flows, show that the effluent is diluted with about nine times

its quantity of pure water, and at no time during the year have the analyses of the stream shown pollution.

Semi-monthly analyses of the sewage and effluent, and monthly analyses of the outlet stream have been made by Mr. Ernest F. Badger, Chemist of the State Board of Health. Monthly analyses of the stream are given in Appendix A. Analyses of the sewage, septic and effluent showing the comparative results obtained in both cold and hot weather are shown in Appendix B. The percentage of purification effected by the septic tank and sand filter is shown in Appendix C.

I wish to extend my thanks to Mr. Badger for his courtesy and aid, as well as suggestions for the successful operation of the plant.

A table showing the length of each size sewer at the present time in each street and also tables showing the total length of sewers in both the eastern and western sewage districts can be found in Appendices D and E, respectively.

WM. FAITOUTE KEENE,

City Engineer.

5. This city has no legal board of health other than the board of aldermen.
6. Charles F. Sweet, M. D., health officer.
8. Undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

C. FRED CRAWFORD, *City Clerk.*

APPENDIX A.
MOSHASSUCK RIVER DRAINAGE DISTRICT, CENTRAL FALLS, R. I.
ANALYSES OF OUTLET STREAM FROM FILTER BEDS.
(Parts per 100,000.)

DATE.	RESIDUE ON EVAPORATION.			AMMONIA.				Nitrogen as		Oxygen Consumed.	
	Total.	Loss on Ignition.	Fixed.	ALBUMINOID.			Chlorine.	Nitrates.	Nitrites.		
				Free.	Total.	In Solution.					In Suspension.
January 2, 1902.....	22.6	4.0	18.6	0.280	.0160	.0140	.0020	3.74	0.89	.0100	0.28
February 25, 1902.....	31.1	7.4	23.7	1.400	.0760	.0580	.0180	6.00	1.05	.0100	0.98
March 13, 1902.....	26.1	6.7	19.4	0.280	.0200	.0180	.0020	3.58	0.67	.0200	0.56
April 9, 1902.....	23.9	6.6	17.2	0.320	.0260	.0220	.0040	3.58	0.68	.0040	0.40
May 5, 1902.....	33.1	9.9	23.2	0.060	.0180	.0180	.0000	4.18	0.93	.0050	0.24
June 4, 1902.....	27.5	6.8	20.7	0.420	.0260	.0220	.0040	4.22	0.76	.0080	0.42
July 3, 1902.....	29.2	10.1	19.1	0.350	.0160	.0120	.0040	4.42	1.03	.0010	0.30
August 6, 1902.....	30.4	7.3	23.1	0.510	.0380	.0280	.0100	5.02	2.18	.0240	0.52
August 27, 1902.....	28.0	6.4	21.6	0.400	.0360	.0280	.0080	4.08	0.80	.0070	0.53
September 9, 1902.....	30.3	6.4	23.9	0.510	.0280	.0240	.0040	5.82	0.86	.0160	0.58
October 6, 1902.....	25.4	4.2	21.2	0.250	.0520	.0340	.0180	3.20	0.36	.0150	1.00
November 7, 1902.....	27.9	8.4	19.5	0.250	.0240	.0200	.0040	4.82	0.96	.0100	0.35

APPENDIX C.

PURIFICATION EFFECTED BY SEPTIC TANK AND SAND FILTERS.

(Parts per 100,000.)

	FREE AMMONIA.			ALBUMINOID AMMONIA.			OXYGEN CONSUMED.			Remarks.
	SeWage.	Effluent.	P. C. Removed.	SeWage.	Effluent.	P. C. Removed.	SeWage.	Effluent.	P. C. Removed.	
Cold weather Dec. 1, 1901, to June 1, 1902.										
Purification effected by Septic Tank	14.00	11.85	15.3	2.62	1.24	53.0	22.38	12.19	45.5	Average 11 Analyses.
Purification effected by Septic Tank and Filter										
Beds 1, 2, 3.	14.00	6.85	51.1	2.62	.3905	85.1	22.38	5.32	76.2	" 13 "
Purification effected by Septic Tank and Filter										
Beds 4, 5.	14.00	7.77	44.5	2.62	.4118	84.3	22.38	5.00	77.7	" 11 "
Purification effected by Septic Tank and Filter										
Beds 6, 7.	14.00	6.76	51.7	2.62	.3796	85.5	22.38	4.00	82.1	" 10 "
Warm weather June 1 to Dec. 1, 1902.										
Purification effected by Septic Tank	16.04	12.42	22.5	1.65	.81	50.9	10.83	8.71	19.6	" 10 "
Purification effected by Septic Tank and Filter										
Beds 1, 2, 3.	16.04	3.96	75.3	1.65	.087	94.7	10.83	1.12	89.7	" 5 "
Purification effected by Septic Tank and Filter										
Beds 4, 5.	16.04	5.36	66.6	1.65	.107	93.5	10.83	1.46	86.5	" 4 "
Purification effected by Septic Tank and Filter										
Beds 6, 7.	16.04	3.19	80.0	1.65	.0708	95.7	10.83	0.97	91.0	" 10 "

CRANSTON.

1. Nothing for the promotion of the public health has been done during the year.
2. The water supply of this town is the same as that of the city of Providence.
3. This town has no sewage system.
6. D. S. Latham, M. D., and John Bigbee, health officers.
7. Gratuitous vaccination was provided during the year, but the number vaccinated is not known.
8. With a few exceptions, undertakers make return of deaths with promptness.
9. Clergymen make returns of marriages promptly.

DANIEL D. WATERMAN, *Town Clerk.*

CUMBERLAND.

No reply from the town clerk.

EAST PROVIDENCE.

1. Except the erection of a small-pox hospital in the southern part of the town, nothing for the promotion of the public health has been done during the year.
2. There has been no extension of the water service of this town, outside of a few new services for private use.
3. There has been no extension of the sewers in this town.
4. No new sanitary ordinances have been enacted during the year. (Contagious disease ordinances, see report of 1893, p. 54.)
5. This town has no legal board of health other than the town council.
6. James H. Williams, health officer.
7. Three hundred and seventy-two persons were gratuitously vaccinated during the year.
8. Undertakers generally send in their returns of deaths promptly, for, in cases where they do not, their attention has been called to the law, resulting in prompt returns in the future.
9. Clergymen make returns of marriages promptly.

WILLIAM E. SMYTH, *Town Clerk.*

FOSTER.

1. Nothing for the promotion of the public health has been done during the year.
2. This town has no public water service.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year.
5. This town has no legal board of health other than the town council.
6. Henry Arnold, M. D., health officer.
7. Gratuitous vaccination was not provided during the year.
8. Undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

GARDNER HOWARD, *Town Clerk*.

GLOCESTER.

1. Nothing for the promotion of the public health has been done during the year.
2. This town has no public water service.
3. This town has no sewage system.
4. No new ordinances have been enacted during the year.
5. This town has no legal board of health other than the town council.
6. George A. Harris, M. D., health officer.
7. Gratuitous vaccination was not provided during the year.
8. Undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

FRANK F. DAVIS, *Town Clerk*.

JOHNSTON.

4. (Contagious disease ordinances, see report of 1896, p. 20.)
5. Ralph H. Shaw, M. D., Hiram Kimball, and William H. Mathewson constitute the board of health of this town.
6. Ralph H. Shaw, M. D., health officer.
7. One hundred and thirty-seven persons were gratuitously vaccinated during the year.

8. Undertakers have promptly made returns of deaths.
9. Clergymen make returns of marriages promptly.

STERRY K. LUTHER, *Town Clerk.*

LINCOLN.

1. Nothing for the promotion of the public health has been done during the year.
2. A slight extension of the public water service of this town, which extension supplies probably one per cent. of the total population of the town, was made during the year.
3. The length of sewers in this town is a little over a mile, and about 15 to 20 per cent. of the population has drainage connected therewith.
4. No new sanitary ordinances have been enacted during the year. The present ones are very well enforced. (Contagious diseases ordinances, see report of 1896, p. 25.)
5. This town has no legal board of health other than the town council.
6. James W. Walker, M. D., health officer.
7. Gratuitous vaccination was provided during the year, and about 4,500 persons, or nearly half the population of this town, were so vaccinated.
8. Undertakers are not very prompt in making returns of deaths, although an improvement in that line is taking place.
9. Clergymen are not very prompt in making returns of marriages.

JOHN JOHNSTON, *Town Clerk.*

NORTH PROVIDENCE.

1. Nothing for the promotion of the public health has been done during the year.
2. There has been no extension of the public water service of this town during the year.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year.
5. This town has no legal board of health other than the town council.
6. Michael J. Kirby, health officer.
7. Gratuitous vaccination was not provided during the year.

8. Undertakers have promptly made returns of deaths.
9. There are no clergymen in this town.

THOMAS H. ANGELL, *Town Clerk.*

NORTH SMITHFIELD.

1. Nothing for the promotion of the public health has been done during the year.
2. This town has no public water service.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year.
5. This town has no legal board of health other than the town council.
6. John S. Hilton, health officer.
7. Gratuitous vaccination was provided during the year, and I should say that about one-sixth of the population availed itself of the same.
8. Undertakers have been fairly prompt in making returns of deaths during the year.
9. Clergymen make returns of marriages promptly.

CHARLES S. SEAGRAVE, *Town Clerk.*

PAWTUCKET.

The following extracts are taken from the report of the Board of Public Works:

SUMMARY OF PUMPING AT NOS. 1, 2, AND 3 STATIONS FOR THE YEAR ENDING SEPTEMBER 30, 1902.

Total expenses for the year.....	\$22,306.68
Total number of gallons pumped into reservoir.....	2,403,299.941
Total cost of raising 1,000,000 gallons into reservoir.....	\$9.24
Total cost of raising 1,000,000 gallons one foot high.....	.034
Average daily consumption of water in U. S. gallons.....	6,584,383
Maximum daily consumption of water in U. S. gallons.....	9,790,558
Minimum daily consumption of water in U. S. gallons.....	3,475,399

Respectfully submitted,

JOHN H. WALKER,

Chief Engineer.

TABLE SHOWING AMOUNT OF RAIN AND MELTED SNOW IN INCHES, FOR THE YEAR ENDING SEPTEMBER 30TH, 1902.

DAYS OF MONTH.	OCTOBER.	NOVEMBER.	DECEMBER.	JANUARY.	FEBRUARY.	MARCH.	APRIL.	MAY.	JUNE.	JULY.	AUGUST.	SEPTEMBER.	DAYS OF MONTH.
1		0.01							*	0.08			1
2						0.50						0.04	2
3	0.720		‡1.37	‡0.07	‡0.72			0.20	1.00	0.24	*		3
4					*			*				0.62	4
5						‡1.43	*		*	0.04			5
6	0.08				*					0.04			6
7								0.04			0.28	1.00	7
8		*	*	‡0.08	*	1.02	‡*	*	0.02	0.13	0.63		8
9		*							0.20			0.39	9
10			0.84						0.02	0.10			10
11									*		0.72		11
12		0.41		‡0.40	*	0.10	1.12						12
13			0.18										13
14												0.62	14
15	2.13		1.58						0.93	0.185	*		15
16									0.24				16
17						1.16	*						17
18	0.20		‡0.24	0.04	‡1.75	0.09			0.22				18
19		‡0.01						0.24	0.28		0.50		19
20												0.34	20
21				0.84	‡1.36	*	*				0.04		21
22													22
23			0.69						0.78	2.87			23
24	*		0.03						0.05				24
25		1.87									0.11		25
26		‡0.01					0.10	0.08		*			26
27	*		‡0.88	0.59	*	0.03			0.58				27
28					3.67	1.59		0.50					28
29							1.80	0.02		0.25			29
30			2.75	*		0.01			0.43			0.86	30
31													31
Tot'ls	3.13	2.31	8.56	2.02	7.50	5.93	3.02	1.08	4.75	3.935	2.28	3.87	

Total rain and melted snow, 44.51.

Depth of snow in inches, 12.5.

* Too small to measure.

† Snow.

‡ Snow and rain.

FILTER FIELDS.

The filter fields have continued during the year to receive and treat the sewage of the Moshassuck River district which now contains 13.276 miles of sewers and serves a population of about 5,400 persons actually connected or about 7,300 persons on the line of the sewers constructed. The average amount of sewage treated daily has increased from 114,345 gallons to 132,961 gallons.

Attention was called in the report of last year to the gradual increase in both the quantity and strength of the sewage received at this plant and to the fact that additional beds would be needed in the immediate future. Plans have

been drawn for the enlargement of the plant and during the year an appropriation of \$6,500.00 was obtained to extend the area of the beds.

The work of enlargement was not started until September, and comparatively little had been accomplished at the close of the fiscal year, September 30, 1902. Before winter sets in, however, it is hoped that some of the additional area will be ready for service and that the beds may not be taxed as heavily as they were during the last winter season.

Detailed information respecting the work performed by these beds is shown below:

TABLE SHOWING AMOUNT OF SEWAGE LET ON AND AMOUNT OF SAND REMOVED FROM EACH BED FROM DECEMBER 1, 1894, TO OCTOBER 1, 1902.

NUMBER OF BED.	Cubic yards of poor sand removed.	Cubic yards of sludge removed.	Average depth in inches of poor sand removed.	Total number of gallons of sewage let on.	Cubic yards of poor sand removed for each 1,000,000 gallons of sewage.
1.....	110	136.04	6 1-2	7,818,937	14.07
2.....	125	131.17	7	8,009,095	15.61
3.....	114	121.89	6 1-3	7,521,402	15.16
4.....	106	115.62	6 5-8	6,850,422	15.47
5.....	180	.....	4 3-8	31,159,671	5.77
6.....	183	45.23	6 1-2	19,836,819	9.22
7.....	132	.....	5 1-2	21,162,760	6.29
8.....	121	.....	5 5-7	19,039,892	6.35
9.....	124	.....	5 3-8	21,383,716	5.80
10.....	151	.....	6 1-3	21,553,235	7.01
11.....	128	.....	5 1-3	22,481,900	5.70
12.....	134	.....	4 3-5	24,082,682	5.56
13.....	143	.....	5	23,557,212	6.07
14.....	.....	.....	.....	1,706,876	.....
15.....	.....	.....	.....	1,728,992	.....
	1,751	549.95	.....	237,893,611	7.36

THE FOLLOWING TABLE SHOWS THE NUMBER OF GALLONS OF SEWAGE
RECEIVED AND TREATED AT THE PLANT DURING THE YEAR.

MONTH.	Gallons of Sewage.	Average Gallons Per Day.
October, 1901.....	3,729,386	120,302
November, 1901.....	4,001,819	133,394
December, 1901.....	4,667,337	150,559
January, 1902.....	4,772,783	153,961
February, 1902.....	4,282,101	152,932
March, 1902.....	1,744,892	56,287
April, 1902.....	2,819,049	93,968
May, 1902.....	5,301,168	171,005
June, 1902.....	4,339,135	144,638
July, 1902.....	4,523,270	145,912
August, 1902.....	4,394,760	141,766
September, 1902.....	3,955,040	131,835
	48,530,740	.....

Average number of gallons per day has been 132,961.

NUMBER OF BED.	Area in acres.	Number of doses of ordinary sewage.	Average quantity of ordinary sewage ap- plied at each dose in gallons.	Number of doses of heavy sewage.	Average quantity of heavy sewage ap- plied at each dose in gallons.	Total quantity of sewage applied to beds during the year in gallons.	Equivalent average daily quantity ap- plied per acre in gallons.*
1.....	.126	80.5	12,600	44.	10,080	1,457,820	31,698
2.....	.132	76.	13,200	44.4	10,560	1,472,064	30,553
3.....	.133	101.	13,300	43.6	10,640	1,807,204	37,226
4.....	.123	105.	12,300	36.5	9,840	1,650,660	36,764
5.....	.307	246.	30,700	.....	.....	7,552,200	67,397
6.....	.211	183.75	21,100	36.	16,880	4,484,905	58,232
7.....	.180	243.25	18,000	.....	.....	4,378,500	66,644
8.....	.157	205.	15,700	.....	.....	3,218,500	56,165
9.....	.176	219.2	17,600	.....	.....	3,857,920	60,057
10.....	.178	203.	17,800	.....	.....	3,613,400	55,618
11.....	.183	228.25	18,300	.....	.....	4,176,975	62,536
12.....	.219	239.	21,900	.....	.....	5,234,100	65,479
13.....	.218	227.	21,800	.....	.....	4,948,600	62,193
14.....	.0054	165.	2,150	.....	.....	354,806	†326,852
15.....	.0054	165.	1,958	.....	.....	323,086	†297,592

* Figured on the basis of 365 days in the year.

† Bed discontinued April 18, 1902.

On December 1, 1894, beds numbered 1, 2, 5, 6, and 7 were started, and one month later the use of beds 8, 9, 10, and 11 was begun.

August 1, 1895, beds 3 and 4 were put in service, and November 1, 1895, beds 12 and 13. In 1898 additional area was found necessary for sludge beds, and in August of that year bed 6 was used for this purpose some of the time.

Experimental beds 14 and 15 were started March 8, 1900, and beds 16 and 17 October 3, 1900. Beds 14, 15, 16, and 17 were all contact beds, the first two receiving septic effluent from the tank and the last two the effluent from the beds 14 and 15.

During the time the tanks have been run as settling tanks merely, from Dec. 1, 1894, to Jan. 13, 1900, from Aug. 7, to Nov. 12, 1901, and from May 9, 1902, to Oct. 1, 1902, a period of five years and nine months, the average amount of sludge raked from the surface of the sludge beds has equalled 3.4 cu. yds. per million gallons of sewage passed through the tanks.

This 3.4 cu. yds. is considered compact sludge, for the amount wheeled from the beds is reduced one-third to allow for the shrinkage that would occur if it were compacted instead of being raked up loose and cast into wheelbarrows. This compact sludge has been found to weigh about 1,180 pounds per cubic yard.

The average amount of poor sand removed from the surface of the beds has been 695 cubic yards per acre. This is equivalent to a depth of $5\frac{1}{4}$ inches.

During the winter months, or from November 12, 1901, to May 9, 1902, sewage was allowed to flow continuously through tank "A," which acted as a septic tank and received during that period 19,396,000 gallons of sewage.

The average amount of solid matter contained in the raw sewage, as indicated by the "total residue on evaporation," was 4.526 cu. yds. per million gallons, and the average amount contained in the effluent from the septic tank was 3.045 cu. yds. per million gallons. This would indicate that there was left in the tank 1.481 cu. yds. per million gallons, or a total of 28.725 cu. yds., by the sewage which flowed through the tank during the time of the experiment.

When the tank was drawn down there was found to be left 100.2 cu. yds. of 85.85% moisture. This equals 14.178 cu. yds. of solid dry matter or 0.731 cu. yds. for every million gallons of sewage that passed through the tank.

This cannot, however, be considered all the solid matter that was found in the tank, for the liquid content that was drawn off contained much matter in suspension, as was evidenced by the sludge that was raked from the sand beds upon which this liquid was discharged.

No reliable estimate can be made of the amount of this solid matter as no analyses were made of the liquid drawn from the top or middle portion of the tank.

The important work performed by the septic tank during this period was the keeping of the sludge beds free from an accumulation of solid matter which would have interfered with the proper working of those beds. On the first of May this solid matter was taken from the tank and buried.

About the middle of December experimental bed No. 16, which is a can twenty inches in diameter and six feet deep filled with coke, was emptied of its contents and filled with five feet of sand similar to that of which the beds are composed. This can was then designated as bed No. 18 and the effluent from contact bed No. 15 was turned upon it at the rate of one million gallons per acre per day.

When the use of the septic tank was discontinued in May, beds 14—15—17 and 18 were also discontinued.

The following tables indicate the efficiency of the several steps in the purification of sewage at the filter fields:

AVERAGES OF CHEMICAL EXAMINATIONS MADE BY THE STATE BOARD OF HEALTH FROM OCTOBER
1, 1901 TO OCTOBER 1, 1902.

(Parts per 100,000.)

	RESIDUE ON EVAPORATION.			AMMONIA.				Chlorine.	NITROGEN AS		Oxygen Consumed.
	Total.	In Solution.	In Suspension.	Free.	ALBUMINOID.				Nitrates.	Nitrites.	
					Total.	In Solution.	In Suspension.				
Sewage, average of 12 analyses (Nov. 1, 1901, to May 14 1902).....	91.4	55.1	36.3	8.07	1.41	.70	.71	8.01	.....	14.03
Effluent from Septic Tank, average of 12 analyses (Nov. 1, 1901, to May 14, 1902).....	61.5	49.2	12.3	6.21	.76	.56	.20	7.62	.....	9.89
Effluent from Septic Tank and Sand Filters, average 12 analyses (Nov. 1, 1901, to May 14 1902).....	36.6	A 13.9	B 22.7	2.99	.1106	.1003	.0103	6.38	1.88	.0465	
Effluent from Septic Tank and Contact Filter No. 14, average 3 analyses (Nov. 1, 1901, to May 14, 1902).....	.....	.....	.....	2.35	.2733	.1827	.0906	7.26	1.12	.0353
Effluent from Septic Tank and Contact Filter No 15, average 7 analyses (Nov. 1, 1901, to May 14, 1902).....	.....	.....	.....	1.99	.2560	.1989	.0571	5.82	.76	.0589
Effluent from Septic Tank and Contact Filter No. 16, average 3 analyses (Nov. 1, 1901, to May 14, 1902).....	32.7	29.8	2.9	.82	.1120	.0967	.0153	6.28	2.07	.0030	
Effluent from Septic Tank and Contact Filter No. 17, average 12 analyses (Nov. 1, 1901, to May 14, 1902).....	.....	.....	.....	.80	.1467	.1192	.0275	6.08	1.79	.0207
Effluent from Septic Tank and Contact Filter No. 18, average 8 analyses (Nov. 1, 1901, to May 14, 1902).....	.....	.....	.....	1.63	.0772	.0690	.0082	5.72	1.10	.0250
Sewage, average of 14 analyses (Oct. 1, 1901, to Nov. 1, 1901, and May 14, 1902, to Oct. 1, 1902).....	110.2	69.6	40.6	8.43	1.35	.69	.66	12.66	.....	12.63
Effluent from Sand Filters, average 14 analyses (Oct. 1, 1901, to Nov. 1, 1901, and May 14, 1902, to Oct. 1, 1902).....	47.7	A 15.8	B 31.9	1.65	.0784	.0524	.0260	9.61	2.71	.0411	

A—Loss on ignition.
B—Fixed.

PURIFICATION EFFECTED BY SEPTIC TANK AND SEVERAL FILTERS.

(Parts per 100,000.)

	FREE AMMONIA.			ALBUMINOID AMMONIA.			OXYGEN CONSUMED.		
	Sewage.	Effluent.	Per cent. Removed.	Sewage.	Effluent.	Per cent. Removed.	Sewage.	Effluent.	Per cent. Removed.
Purification effected by Septic Tank.....	8.07	6.21	23.0	1.41	.76	46.1	14.03	9.89	29.5
Purification effected by Septic Tank and Sand Filters.....	8.07	2.99	62.9	1.41	.1106	92.1	14.03	1.73	87.6
Purification effected by Septic Tank and Filter No. 14.....	8.07	2.35	70.9	1.41	.2733	80.6	14.03	3.39	75.8
Purification effected by Septic Tank and Filter No. 15.....	8.07	1.99	75.3	1.41	.2560	81	14.03	3.17	77.4
Purification effected by Septic Tank and Filter No. 15-16.....	8.07	.82	89.8	1.41	.1120	92.0	14.03	1.33	90.5
Purification effected by Septic Tank and Filter No. 15-17.....	8.07	.80	90.1	1.41	.1467	89.6	14.03	1.96	86.0
Purification effected by Septic Tank and Filter No. 15-18.....	8.07	1.63	79.8	1.41	.0772	94.5	14.03	1.15	91

PURIFICATION EFFECTED BY SEDIMENTATION TANKS AND SAND FILTERS.

(Parts per 100,000.)

	FREE AMMONIA.			ALBUMINOID AMMONIA.			OXYGEN CONSUMED.		
	Sewage.	Effluent.	Per cent. Removed.	Sewage.	Effluent.	Per cent. Removed.	Sewage.	Effluent.	Per cent. Removed.
Purification effected by Sedimentation Tanks and Sand Filters.....	8.43	1.65	80.4	1.35	.0784	94.2	12.63	1.00	92.1

The records from our several rainfall gauges have been collected and the following table shows the total monthly precipitation recorded by the different ones.

TOTAL AMOUNT OF PRECIPITATION FOR EACH MONTH.

MONTH.	Masonic Building, Standard gauge.	Masonic Building, Automatic gauge.	Pumping Station No. 3, Standard gauge.	Filter Field, Standard gauge.	Diamond Hill, Standard gauge.
1901.					
October.....	2.872	2.746	3.13	2.86	3.3625
November.....	2.052	1.885	2.29	2.4825	2.7725
December.....	8.785	7.518	8.42	9.0675	9.1075
1902.					
January.....	1.703	1.372	2.02	2.2325	1.975
February.....	5.636	4.701	6.09	8.52	8.39
March.....	5.185	4.483	5.93	6.50	5.97
April.....	3.233	2.847	3.02	3.04	3.005
May.....	1.148	1.123	1.08	1.1325	1.895
June.....	4.909	4.657	4.75	4.9184	3.7275
July.....	3.949	3.679	3.935	3.2875	4.44
August.....	2.457	2.404	2.28	2.1125	1.7975
September.....	3.928	3.477	3.87	4.66	4.30
Total precipitation for year.....	45.857	40.892	46.815	50.8134	50.7425

ELEVATIONS ABOVE MEAN HIGH TIDE, PAWTUCKET RIVER.

Gauge at Masonic Building, standard.....	130 feet
Gauge at Masonic Building, automatic.....	140 feet
Gauge at Pumping Station No. 3.....	90 feet
Gauge at Filter Fields.....	40 feet
Gauge at Diamond Hill.....	220 feet

The automatic gauge maintained by this department enables us to obtain figures relative to rates of rainfall which are desirable aids in sewer computations.

Such records have not been generally kept in the past, but more attention is now being paid by engineers to this important subject.

GEO. A. CARPENTER,

City Engineer.

PROVIDENCE.

Extracts from report of city engineer and Board of Public Works:

The population of the city is estimated at 185,000, and the population supplied in the suburbs is estimated at 13,400. Total population supplied 198,400.

The number of meters in use in the city is 17,732, and the number of meters in use in the suburbs is 1,484. Total number of meters in use, 19,216.

The number of service pipes in use in the city is 20,947, and the number of service pipes in use in the suburbs is 1,811. Total number of service pipes in use, 22,758.

The average daily use of water per service for the year 1902 has been 508 gallons.

The average daily use of water per capita for the year 1902 has been 58 gallons.

The water receipts for 1902 were \$605,307.35.

The net cost of maintenance for 1902 was \$134,104.04.

The net cost of the water works construction from November 8, 1869, to January 1, 1903, is \$6,496,966.27, upon which there has been a revenue for water sold of \$10,617,340.39.

MONTHS.	Consumption per month.	Average monthly consumption.	Average daily consumption per month.	Average daily consumption for the year.
January.....	361,070,572		11,647,438	
February.....	307,928,168		10,997,435	
March.....	338,650,890		10,924,222	
April.....	315,481,061		10,516,035	
May.....	325,043,833		10,485,285	
June.....	355,399,904		11,846,663	
July.....	374,783,502		12,089,790	
August.....	370,987,386		11,967,335	
September.....	349,836,682		11,661,223	
October.....	368,744,603		11,894,987	
November.....	354,323,683		11,810,789	
December.....	398,395,772		12,851,477	
Total.....	4,220,646,056			
Averages.....		351,720,505		11,563,414

The maximum consumption of water for any one day during the year 1902 was 15,656,000 gallons.

The amount of water consumed shown in the above table includes the supplying of about forty and one-tenth miles of distribution pipes located in adjoining towns, as well as supplying the greater part of the State Institutions at Cranston. The new filtration plant at Pettaconset has used, and will require, a considerable quantity of water. Dexter Asylum has continued to use a considerable quantity of water, as usual, which, together with the use of water in the cold months through small blow-offs at bridge crossings and elsewhere, to prevent freezing, helps to keep up the consumption.

On the 15th of July last a contract was made with Edward W. Everson and Frederick E. Shaw, contractors, for building a slow sand filtration plant at Pettaconset. Not a large amount of work has been done beyond clearing and grubbing the land, building embankments around the area, building one of the small buildings and getting some machinery ready for moving and screening sand, etc. With the opening of spring work should proceed rapidly. The plant will consist of six one-acre filter beds, located on the low ground on the opposite side of the river from the pumping station. The raw water will be raised about seven feet above the ordinary height of the river and when filtered will be taken under the river in a forty-eight inch pipe to the present basin at the pumping station.

WATER WORKS STATISTICS FOR THE YEAR 1902.

*In Accordance with Form Adopted by the New England Water Works Association.
Providence Water Works, Providence County, R. I.*

Population of Providence.....	185,000
Estimated population supplied in suburbs.....	13,400
Date of construction.....	1870 to 1876
By whom owned.....	City of Providence.
Source of supply.....	Pawtuxet river, in the town of Cranston.
Mode of supply:	

The water is pumped from the Pawtuxet river into a storage reservoir located upon a hill about one mile distant. From this reservoir it flows into the city by gravitation, directly supplying a second storage reservoir within the city limits and also that portion of the city which is of sufficiently low elevation to be served by gravitation. To supply that part of the city of too high an elevation to be served by these reservoirs, a third reservoir is located in the town of North Providence. The water is pumped by supplementary pumping machinery

from the second reservoir above mentioned or from the mains, into the high service reservoir. This supplementary pumping machinery can also supply the high service district, if the reservoir should be out of service, by pumping directly into the mains.

In addition to the regular distribution pipes there is an independent high pressure fire system (deriving its supply from the high service), for protecting an area of about one-half of one square mile in the centre of the business portion of the city.

PUMPING.

1. Builders of pumping machinery:

a. Worthington Duplex engine, built by Henry H. Worthington (Out of service.)

b. Cornish engine, built by Paulding, Kemble & Co.

c. Corliss Vertical engine, built by George H. Corliss.

d. Worthington Triple Expansion engine, built by Henry R. Worthington.

e. Nagle High Service engine, built by the Providence Steam Engine Co.

f. Holly High Service engine, built by the Holly Manufacturing Co.

Worthington

Corliss

Holly

Triple

High

Expansion.

Service.

2. Description of coal used,

a. Bituminous. Bituminous. Anthracite egg.

b. George's Creek George's Creek, Reading hard,
Cumberland. Cumberland and Reading free burning
Cranston. Beaver Meadow,
Pittston and Scranton.

c. Price, per gross ton delivered

\$5.21

\$4.66

\$5.35

d. Percentage of ash,

9.6

13.8

18.5

e. Wood, price per cord,

\$4.50

\$4.50

\$4.00

3. Coal consumed for the year, in pounds,

*4,850,576

†567,000

913,287

* January 1 to October 21, after which fuel oil was used.

† Not including 51,900 pounds when engine was not in service.

4.	[Pounds of wood consumed] \div 3 = equivalent amount of coal in pounds,		
	333	*8.333	1,484
4a.	Amount of other fuel used,		
	150,350 gallons	.....	.....
	of fuel oil, after Oct. 21.		
5.	Total equivalent coal consumed for the year, (3) + (4) in pounds,		
	4,850,909 to Oct. 21	575.333	914.771
6.	Total pumpage for the year in gallons, with allowance for slip,		
	3,089,426,010 to Oct. 21	345,591,035	519,385,796
	885,394,564 after Oct. 21.		
7.	Average static head against which pumps work, in feet,		
	169.25 to Oct. 21	171.23	111.89
8.	Average dynamic head against which pumps work, in feet,		
	177.11 to Oct. 21	176.31	126.42
9.	Number of gallons pumped per pound of equivalent coal (5),		
	637 to Oct. 21	601	568
10.	Duty = $\frac{\text{Gallons pumped (6)} \times 8.34 \text{ (lbs.)} \times 100 \times \text{dynamic head (8)}}{\text{Total fuel consumed (5)}}$.		
	94,072,700 to Oct. 21	88,325,500	59,863,100

COST OF PUMPING, FIGURED ON PUMPING STATION EXPENSES, VIZ.: \$28,877.44 FOR THE LOW SERVICE, AND \$5,556.74 FOR THE HIGH SERVICE.

11.	a.	Per million gallons pumped into low service reservoir the cost was.....	\$6.68
	b.	Into high service reservoir (pumped twice, \$6.68 + \$10.70).....	\$17.38
12.		Per million gallons raised one foot high (dynamic), low service, the cost was.....	\$0.0378
		High service (pumped twice, \$0.0378 + \$0.0846), cost was.....	\$0.1224
O.		Net cost of works to date.....	\$6,496,966.27
P.		Bonded debt at date.....	6,009,000.00
Q.		Value of Sinking Fund at date.....	1,259,570.60
R.		Average rate of interest.....	0.0375

CONSUMPTION.

1.	Estimated total population of district at date.....	198,400
2.	{ Estimated population on lines of pipe, } Number not taking city water so	
3.		
	{ Estimated population supplied, } small that total population is used.	

* Not including 250 pounds when engine was not in service.

4.	Total number of gallons consumed for year.....	4,220,646,056
5.	{ Passed through meters, Percentage of consumption metered, }	Estimated about 60 per cent.
6.		
7.	Average daily consumption in gallons.....	11,563,414
8.	Gallons per day to each inhabitant.....	58
10.	Gallons per day to each tap (Distribution 22,).....	508

DISTRIBUTION.—MAINS.*

1.	Kind of pipes used.....	Cast iron.
2.	Sizes.....	From 6 to 36 inches.
3.	Extended.....	28,239.52 feet.
4.	Discontinued.....	1,199.21 feet.
5.	Total now in use †.....	336.1560 miles.
7.	Number of leaks for year, 27, 18 of which were joints, 8 due to settlement, 1 electrolysis, repairs costing \$256.90.	
8.	Small distribution pipes, less than four inches, total length	None.
9.	Fire hydrants added. ‡.....	41
10.	Number of hydrants now in use. ‡ (a) fire.....	1,960
	(b) watering cart hydrants or street sprinklers.....	63
11.	Stop gates added.....	54
12.	Number now in use.....	3,530
13.	Stop gates less than four inches.....	None.
14.	Number of blow-off gates.....	32
15.	Range of pressure on mains at centre of city for day and night.....	64 to 73 lbs.

HIGH PRESSURE FIRE SERVICE.

Kinds of pipe used.....	Cast iron.
Size.....	12, 16, and 24-inch.
Total now in use §.....	5.5698 miles.
Hydrants added.....	None.
Number now in use.....	92
Stop gates now in use.....	31
Number of blow-off gates.....	4
Pressure on mains, at centre of business portion of city, for day and night.....	114 lbs.

* Not including high pressure fire service.

† Includes 10,084 feet of 36-inch pipe, 561 feet of 30-inch pipe, and 695 feet of 24-inch pipe, which are force mains, and 19.66 feet of 30-inch pipe, and 19,478.46 feet of 24-inch pipe, which are used both as a force and delivery main.

‡ Not including high pressure fire service, or private hydrants.

§ No connections of any description except for city fire hydrants.

SERVICES.

16.	Kind of pipe.....	Lead from $\frac{1}{2}$ to $1\frac{1}{4}$ inches, and cast iron.
17.	Sizes.....	From $\frac{1}{2}$ to 10 inches.
21.	Services added.....	591
22.	Number now in use.....	22,758
25.	Meters added.....	717
26.	Number now in use.....	19,216
27.	Percentage of services metered.....	84
29.	Elevator supplies added.....	4
30.	Number now in use, 149 of 4 and 6-inch, and 20 smaller supplies connected to house elevators.	

REMARKS.

The Cornish engine was not run during the year.

The Worthington Duplex engine was not run during the year. (Out of service.)

The Corliss Vertical engine was run on 116 days.

The Worthington Triple Expansion engine was run on 327 days.

The Nagle engine was not run during the year.

The Holly engine was run on 303 days.

The work relating to this department has been in charge of Irving S. Wood, Assistant Engineer.

SEWAGE DISPOSAL.

The work done at the Ernest street sewage pumping station is shown below.

Total amount pumped for the year is estimated at 6,352,144,806 gallons, at a total outlay for labor, fuel, work in screen chamber and all other charges of \$16,275.70, or \$2.562 per million gallons pumped, or \$0.09316 per million foot gallons pumped.

Daily average for the year.....	17,391,225 gallons
Daily average for wet weather, or days in which the rainfall was enough to visibly affect the quantity pumped.....	23,382,804 gallons
Daily average for dry weather (Sundays not included).....	17,861,507 gallons
Sunday average for dry weather.....	10,525,797 gallons
Days on which a measurable quantity of rain fell, but not enough to visibly affect the pumping.....	54
Days on which the pumping was visibly affected.....	58
Days on which no rain fell.....	253

At the sewage precipitation plant has been completed the first year of full operation, and it can be said that the plant is working satisfactorily. The following per cent. of organic matter has been removed from the sewage as shown by the records for the year 1902:

Total amount (by albuminoid ammonia)	51.42
Amount in suspension (by albuminoid ammonia)	83.51
Total amount (by oxygen consumed)	54.55

The large amount of organic matter removed from the sewage has resulted in producing a very much clearer water in the bay below the outlet, and the water in the Providence river and harbor, while still much below the standard, is greatly improved over what it was several years ago.

Lime and sulphate of iron are the chemicals used for precipitation.

Estimated quantity of sewage passed through tanks was 6,565 million gallons.

Amount of sludge pumped from sludge well into reservoirs was 36,255,000 gallons. After standing, about 13 per cent. was drawn off as comparatively clear water, leaving about 31,384 000 gallons that were passed through the presses.

(For view of sludge presses and general plan of sewage plant, see previous report, pages 42 and 44.)

Presses emptied 24,922 times or 1,259.2 gallons per pressing.

Hours time of pressing, 2.656.5.

The sludge cake is carried about one-eighth of a mile by steam engine and cars, and used for filling. The same engine and cars are used to transfer the lime and iron from the New York, New Haven & Hartford Railroad tracks, about three-quarters of a mile to the plant, where the cars are run into the upper story of the chemical building and the lime and iron dumped into the bins.

The work relating to this department has been in charge of John E. Bowen, Assistant Engineer.

5. This city has no legal board of health other than the board of aldermen.
6. Charles V. Chapin, M. D., superintendent of health.
7. (See report of Dr. Chapin.)
8. As a rule, undertakers make prompt returns of deaths.
9. As a rule, clergymen make returns of marriages promptly. There has been great improvement upon previous years.

SCITUATE.

No reply from the town clerk.

SMITHFIELD.

1. Nothing for the promotion of the public health has been done during the year.
5. This town has no legal board of health other than the town council.
6. Jenckes Smith, health officer.
7. Gratuitous vaccination was not provided during the year.
8. Undertakers make prompt returns of deaths.
9. Clergymen make returns of marriages promptly.

OSCAR A. TOBEY, *Town Clerk.*

WOONSOCKET.

2. All of the population of this city is supplied by the public water service.
3. The aggregate length of sewers in this city is 11 6-10 miles, and about 9,000 are connected therewith.

The following extracts are from the report of the superintendent of the City engineer's department:

SEWER CONNECTIONS.

During the year 87 connections have been made with the main sewers, 13 of which were made by the sewer department and 74 by licensed drain layers. This makes a total of 524 connections made with the main sewers to date; 3 extensions of connections have also been made. It required to make these connections 25,846 lineal feet, or 4.82 miles, of sewer pipe. The sewage from 1,406 tenements, 27 blocks, 2 laundries, 9 mills, 3 hotels 7 boarding-houses, and 5 restaurants are carried by these connections to the main sewers. In these tenements, etc., there live or are employed 8,775 persons. In addition there are 9 schoolhouses connected with the sewer, having 2,500 school children six (6) hours per day for five (5) days per week.

The inspection of sewer connections has required the services of one inspector all the time when the connection was being made.

FILTER BEDS.

In the latter part of the year the city council appropriated \$5,000 for an additional filter bed; this is very much needed, and it should be built as early in the year as possible. During the last two years the filter beds have been overworked, but they have also done splendid work, as shown by the tables of analysis. The

average area of the filter bed to which the sewage is applied is about one-half acre and the average dose has been for the past year 420,000 gallons, or at the rate of 840,000 gallons per acre, and the character of the effluent certainly shows good work. I will quote in part from a communication from Dr. Gardner T. Swarts, secretary of State Board of Health: "I will state that the results show that the intermittent sand filters show most satisfactory results. Again I quote: "The samples supplied to us as being the effluent from your sand beds show a clear water which must necessarily dilute the amount of impurities in the stream into which the effluent flows. If your public supply of drinking-water could receive similar attention there would be no reason why the city of Woonsocket should not receive as clear a water as that flowing from your sewage beds." In addition to the large amount of sewage cared for at the East Filter Fields, there is a very large amount of sewage from cesspools, paper and rubbish from everywhere, carried in carts and wagons to the West Filter Fields and there disposed of as follows: Matter from cesspools is dumped into trenches and covered over with earth, the paper is burned and the rubbish is carted to the lower end of the field and dumped onto the ground. During the year 1901 there were disposed of 3,378 loads of sewage, 1,940 loads of paper, and 777 loads of rubbish, making a total for the year of 6,095 loads. During the year 1902 there were 3,597 loads of sewage, 1,361 loads of paper, and 429 loads of rubbish, making a total for the year of 5,387 loads, or a total of 11,482 loads for two years, and there is undoubtedly a large amount disposed of elsewhere.

The percentage of removal of impurities as shown by the yearly average is: Free ammonia, 92.88 per cent.; albuminoid ammonia, 95.2 per cent.; carbonaceous matter, shown by the oxygen consumed, 93 per cent.; removal of bacteria, 99.3 per cent.

FRANK H. MILLS,

City Engineer.

6. William C. Monroe, M. D., health officer.
7. Gratuitous vaccination was provided during the year.
8. Undertakers make prompt returns of deaths.
9. Clergymen make returns of marriages promptly.

WILLIAM C. MASON, *City Clerk.*

WASHINGTON COUNTY.

CHARLESTOWN.

1. Nothing for the promotion of the public health has been done during the year.

2. This town has no public water service.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year. (Contagious disease ordinance, see report of 1900, p. 56.)
5. This town has no legal board of health other than the town council
6. Milton Duckworth, M. D., health officer.
7. Gratuitous vaccination was not provided during the year.
8. Undertakers have made prompt returns of deaths.
9. Clergymen make returns of marriages promptly.

GEORGE C. CROSS, *Town Clerk.*

EXETER.

1. Nothing for the promotion of the public health has been done during the year.
2. This town has no public water service.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year.
5. This town has no legal board of health other than the town council.
6. This town has no health officer.
7. Gratuitous vaccination was not provided during the year.
8. Undertakers do not make prompt returns of deaths.
9. Clergymen make returns of marriages promptly.

JOHN H. EDWARDS, *Town Clerk.*

HOPKINTON.

1. Nothing for the promotion of the public health has been done during the year.
2. This town has no public water service.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year. (Contagious disease ordinance, see report of 1894, p. 59.)
5. This town has no legal board of health other than the town council.
6. Henry H. Crandall, health officer.
7. Gratuitous vaccination was not provided during the year.

8. Undertakers make prompt returns of deaths.
9. Clergymen make returns of marriages promptly.

EDWIN R. ALLEN, *Town Clerk*.

NARRAGANSETT.

1. Nothing for the promotion of the public health has been done during the year.
2. There has been no extension of the public water service of this town during the year.
3. The aggregate length of sewers in this town and the number of people connected therewith is the same as for the previous year.
4. No new sanitary ordinances have been enacted during the year. (Ordinance relative to sewers, see report of 1901, p. 47.)
5. This town has no legal board of health other than the town council.
6. Solomon H. Hale, health officer.
7. Gratuitous vaccination was provided during the year. Most of those who availed themselves of the same were school children.
8. Undertakers make fairly prompt returns of deaths.
9. Clergymen make fairly prompt returns of marriages.

W. HERBERT CASWELL, *Town Clerk*.

NORTH KINGSTOWN.

1. Nothing for the promotion of the public health has been done during the year.
2. This town has no public water service.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year. (Nuisance and contagious disease ordinances, see report of 1896, p. 60.)
5. This town has no legal board of health other than the town council.
6. Harold Metcalf, M. D., health officer.
7. Gratuitous vaccination was provided during the year, and about one-fourth of the population availed itself of the same.
8. Undertakers make prompt returns of deaths.
9. Clergymen make returns of marriages promptly.

THOMAS J. PIERCE, *Town Clerk*.

RICHMOND.

1. Nothing for the promotion of the public health has been done during the year.
2. This town has no public water service.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year.
5. This town has no legal board of health other than the town council.
6. Charles A. Fuller, health officer.
7. Gratuitous vaccination was provided during the year in February, and about 149 persons availed themselves of the same.
8. Undertakers make prompt returns of deaths.
9. Clergymen are now doing very well in making prompt returns of marriages; much better than formerly.

HALSEY P. CLARKE, *Town Clerk.*

SOUTH KINGSTOWN.

No reply from the town clerk.

WESTERLY.

1. Nothing for the promotion of the public health has been done during the year.
2. About seven-eighths of the population of this town is supplied by the public water service.
3. This town has no sewage system.
4. No new sanitary ordinances have been enacted during the year; the present ones have been well enforced.
5. This town has no legal board of health other than the town council.
6. E. Howard Clarke, health officer.
7. Gratuitous vaccination was not provided during the year, as none was requested.
8. Undertakers make prompt returns of deaths.
9. Clergymen make returns of marriages promptly.

WILLIAM HOXSEY, *Town Clerk.*

REPORTS OF
HEALTH OFFICERS.

1902.

CIRCULAR TO HEALTH OFFICERS.

CIRCULAR No. 131.

OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH,

PROVIDENCE, January 1, 1903.

To the Health Officer:

DEAR SIR:—An important feature of the annual reports of the Rhode Island State Board of Health is that of giving a connected history of the occurrence of contagious and epidemic diseases from year to year, as they may have prevailed in the different towns, whether epidemically or in a less degree, together with the location in the town (village or otherwise), and season of the year.

If the **proportion** of the **fatal** cases to the **whole number** of cases of the same **disease** could be given, the value of such reports would be very much enhanced. Such proportion can be ascertained only in such towns as *by town ordinance* require physicians to report all cases of such diseases as come within their charge.

An **approximate** proportion can, however, be given, after the subsidence of the disease, by inquiry of persons living in the immediate neighborhood of the prevalence of such disease, as to the number of the sick, or by house to house visitation where the sickness occurred, with the same inquiry, and by the comparison of the deaths with recoveries as so ascertained.

It is for the purpose of obtaining such information, in full or approximate, and also what may have been done to prevent and restrict diseases, that the questions in the inclosed circular are sent to the various health officers of the State.

To Health Officers who are not physicians, it may be said that the term **epidemic** within the meaning of the questions proposed, is the prevalence of some disease to the extent of one or more persons affected with the disease to every five or six persons living in adjacent tenements or in the near neighborhood, or a smaller proportion, not less than one case of the disease in every ten or twelve of the population, extending over a large area of territory. One sick in

every twelve to sixteen persons might be called a **large prevalence**, and one sick in every twenty to twenty-five, a **moderate prevalence**. The number of cases of any one disease may have to be estimated, but make them as nearly correct as possible.

If, therefore, you will have the kindness to reply to the questions in the said circular, according to the best knowledge you have been able to obtain, and forward in the inclosed stamped envelope, you will favor one of the most important interests in the State, and greatly oblige,

Yours truly,

GARDNER T. SWARTS,

Secretary State Board of Health.

CIRCULAR No. 132.

DEAR SIR:—Replies to the following questions, as suggested in the accompanying circular (No. 131), are respectfully solicited; said replies to be made on this circular, following each question:

1. Name of town.

2. Name of health officer.

3. Have there been, within your knowledge, any epidemics, or any large prevalence of contagious or infectious diseases in your town during the past year? If so, of what disease or diseases? in what locality or localities? how many of each disease?* number of deaths? and in what months of the year?

Diseases.	Locality.	No. of cases.	No. of deaths.	Months in which they occurred.

4. Was isolation maintained or attempted?*

5. What proportion of the sick, if any, were isolated?

6. Was any inspection of premises made, where sickness prevailed, as to the

*According to the best knowledge obtainable.

sanitary condition of the cellars, pantries, sinks, sink-drains, water-closets, if any, cess-pools, out-house privies, distance of wells from accumulations of filth, etc., etc.? If so, please give a general statement as to whether they were sanitarily in conditions good or bad, or, if any thing or place was unusually unsanitary, give a full description. Or, if the cause of any outbreak of disease was found, please state what.

7. Did you make any sanitary inspections during the past year, by order of the town council or from your own option? If so, what were they and how made?

8. Do you know of any location in your town that seems to be particularly unhealthy to any considerable number of persons? If so, and the cause is suspected, can such cause be removed at any reasonable expense?

9. Do you report to your town council nuisances dangerous to the public health, or unsanitary premises within your knowledge; or of buildings unsafe for occupants in case of fire? (See Chapter 495, Section 6, Public Laws.)

10. Has there, to your knowledge, been any contamination of any of the water, milk, or ice supplies in your town?

11. Please give names and addresses of dealers in ice in your town.

REPORTS OF HEALTH OFFICERS.

BRISTOL COUNTY.

1. BARRINGTON.—No report from the health officer.

1. BRISTOL.

2. Everett L. Church, health officer.

3. There have been no epidemics or any large prevalence of contagious diseases in this town during the year.

4. Isolation was maintained in all instances.

5. Most of the sick were isolated.

6. Inspection of premises where sickness prevailed was made, and in most cases the sanitary conditions were found to be good.

7. From my own option, I made sanitary inspections of cess-pools and found them in bad condition.

8. No unhealthy localities in this town are known.

9. All public nuisances, unsanitary premises, etc., are reported to the town council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. Morris Brothers and J. P. Reynolds are the ice dealers of this town.

1. WARREN.

2. George L. Drown, health officer.

3. Small-pox was prevalent in the north end of the town during the months of March and April, there being fifteen cases of this disease, with one death.

4. Isolation was maintained.

5. All of the sick were isolated.

7. A number of sanitary inspections were made during the year.

8. No unhealthy localities in this town are known.

9. All public nuisances, unsanitary premises, etc., are reported to the town council, when brought to my attention.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. E. Tiffany, of Barrington, and Fred M. Tanner are the ice dealers of this town.

KENT COUNTY.

1. COVENTRY.

2. Dr. John Winsor, health officer.

3. There were no epidemics in this town during the year.

4. Isolation was maintained.

5. All were quarantined that was considered necessary.

6. Inspections of premises where sickness prevailed were made, and all found in fair sanitary condition.

7. Several sanitary inspections were made during the year, mostly of closets in the village of Anthony.

8. No unhealthy localities in this town are known.

9. All public nuisances, unsanitary premises, etc., are reported to the town council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. Manchester Brothers, Daniel Wood, and Winfield T. Lewis are the ice dealers of this town.

1. EAST GREENWICH.

2. Elbridge G. Carpenter, M. D., health officer.

3. There were no epidemics in this town during the year.

4. The occasional cases of scarlet fever and diphtheria were isolated.

6. Inspections of premises where sickness prevailed were made.

7. All sanitary inspections made during the year were upon request of interested parties.

8. No unhealthy localities in this town are known.

9. All public nuisances, unsanitary premises, etc., are reported to the town council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. George W. Sunderland and E. A. Sweet are the ice dealers of this town.

WEST GREENWICH has no health officer.

1. WARWICK. No report from the health officer.

NEWPORT COUNTY.

1. JAMESTOWN. No report from the health officer.

1. LITTLE COMPTON. No report from the health officer.

1. MIDDLETOWN.

2. George E. Ward, health officer.

3. There were no epidemics in this town during the year.

6. No inspection of premises where sickness prevailed was made.

7. No sanitary inspections were ordered.

8. No unhealthy localities in this town are known.

9. I have had no occasion for reporting public nuisances or unsanitary premises.

1. NEWPORT.

2. J. W. Sampson, executive health officer.

3. The contagious diseases reported during the year were as follows: scarlet fever, 78 cases and 3 deaths; diphtheria, 49 cases and 6 deaths; typhoid fever, 72 cases and 8 deaths; and small-pox, one fatal case.

4. Isolation was maintained.

5. About seventy per cent. of the sick were isolated.

6. Inspections of premises where sickness prevailed were made, and generally sanitary conditions were good; the most trouble was from sinks without traps.

7. Sanitary inspections were ordered by the board of health, and were made by the inspector of nuisances and the executive officer.

8. No unhealthy localities in this city are known.

9. The board of health has full power in all cases dangerous to public health.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this city.

11. The Arctic and the Newport Ice Companies are the ice dealers of this city.

1. NEW SHOREHAM.

2. Hamilton A. Mott, health officer.

3. There were no epidemics in this town during the year.

4. Isolation was not maintained.
5. None of the sick were isolated.
6. Inspections of premises where sickness prevailed were not made.
7. No sanitary inspections were made during the year.
8. No unhealthy localities in this town are known.
9. All public nuisances, unsanitary premises, etc., are reported to the town council.
10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.
11. C. J. Negus is the ice dealer of this town.

1. PORTSMOUTH.

2. Minot A. Steele, M. D., health officer.
3. Typhoid fever was prevalent in this town during the months of September, October, and November, there being thirteen cases of this disease, three of them being fatal.
4. Isolation was not maintained.
6. Inspections of premises where sickness prevailed were made, and in all cases the sanitary conditions were found to be good, with one exception: namely, a large tank of water used for drinking purposes in which was found a large number of dead sparrows.
8. No unhealthy localities in this town are known.
9. All public nuisances, unsanitary premises, etc., when any such occur, are reported to the town council.
10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.
11. William H. Tallman is the ice dealer of this town.

1. TIVERTON.

2. Edward P. Stimson, M. D., health officer.
3. There were no epidemics in this town during the year.
4. Isolation was attempted and maintained in some cases.
6. Inspections of premises where sickness prevailed were made, and sanitary conditions generally found good.
10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. Isaac F. Brownell, of Tiverton, and Seabury & Peckham, of Tiverton Four Corners, are the ice dealers of this town.

PROVIDENCE COUNTY.

1. BURRILLVILLE.

2. John W. Clavin, health officer.

3. There were no epidemics in this town during the year.

4. Isolation was maintained in a few cases of diphtheria.

6. Inspections of premises where diphtheria prevailed (also school houses, wells, and vaults) were made, but no unusual conditions were found. All premises were placed in good order.

7. Continual sanitary inspections, both by order of the town council and from my own option, were made during the year, and wherever unhealthy or unsanitary conditions were found, the same were rectified to the best of my ability.

8. No unhealthy localities in this town are known.

9. All public nuisances, unsanitary premises, etc., are reported to the town council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. Frank W. Wood, of Harrisville, and Charles A. Moore, of Pascoag, are the ice dealers of this town.

1. CENTRAL FALLS.

2. Charles F. Sweet, M. D., health officer.

3. During the year there were fifteen cases of small-pox in this city, none of which, however, were fatal; also 140 cases of measles, four of which were fatal.

4. Isolation was maintained.

5. All of the sick were isolated. In the measles cases all children in the affected families were kept from school.

6. Inspections of premises where sickness prevailed were made, but no unusually unsanitary place was found.

7. Sanitary inspections of premises were made in all cases of contagious and infectious disease, and on any complaint of anything unsanitary or unpleasant even.

8. No unhealthy localities in this city are known.

9. All nuisances are ordered abated and abatement insisted upon.

10. There has been, to my knowledge, no contamination of the water, milk or ice supplies of this city.

11. George H. Spaulding, the Central Falls Ice Company, and Charles H. Perry & Company are the ice dealers of this city.

1. CRANSTON.

2. Daniel S. Latham, M. D., health officer.

3. There were no epidemics in this town during the year.

4. Isolation was attempted, and very well maintained.

5. All of the sick were isolated.

6. Inspections of premises where sickness prevailed were made, and in most cases sanitary conditions were good. During the summer months the vicinity around Church street became so unsanitary that the council condemned several buildings, and compelled the landlords to close the same.

7. Sanitary inspections of the premises described above were made first at my own option, and later by advice from the town council.

8. No unhealthy localities in this town are known.

9. All public nuisances, unsanitary premises, etc., are reported to the town council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. The Crystal Ice Company is the ice dealer of this town.

1. CUMBERLAND.

2. James A. Cullen, M. D., health officer.

3. There were no epidemics in this town during the year.

4. Isolation was maintained.

5. All of the sick were isolated.

6. Inspections of premises where sickness prevailed were made, and sanitary conditions were found to be good.

8. Cushing street, in Ashton, is improperly drained. As a result, there is a pool of water present throughout the year. Malaria is a common complaint in this neighborhood.

9. All public nuisances, unsanitary premises, etc., are reported to the town council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. John Conley, of Ashton; James Meharg, of Lonsdale, the Lonsdale and the Pawtucket Ice Company are the ice dealers of this town.

1. EAST PROVIDENCE. No report from the health officer.

1. FOSTER.

2. Henry Arnold, M. D., health officer.

3. There were no epidemics in this town during the year.

7. No sanitary inspections were made during the year.

8. No unhealthy localities in this town are known.

9. Public nuisances and unsanitary premises are not reported to the town council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. There are no ice dealers in this town.

1. GLOCESTER.

2. George A. Harris, M. D., health officer.

3. There were no epidemics in this town during the year.

7. No sanitary inspections were made during the year.

8. No unhealthy localities in this town are known.

9. There have been no public nuisances or unsanitary premises to report during the year.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. Wilson & Place are the ice dealers of this town.

1. JOHNSTON.

2. Ralph H. R. Shaw, M. D., health officer.

3. There were no epidemics in this town during the year.

7. From my own option, inspections of cess-pools and privy vaults were made periodically.

8. No unhealthy localities in this town are known.

9. Public nuisances and unsanitary premises are not reported to the town council, as the board of health of this town possesses the powers formerly vested in the council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. W. E. Merritt is the ice dealer of this town.

1. LINCOLN. No report from the health officer.

1. NORTH PROVIDENCE. No report from the health officer.

1. NORTH SMITHFIELD. No report from the health officer.

1. PAWTUCKET.

2. Byron U. Richards, M. D., city physician.

3. Typhoid fever was quite prevalent during the months of September and October, there being about thirty cases with six deaths.

4. Isolation was maintained in cases of diphtheria, scarlet fever, and small-pox.

5. All of the sick were isolated.

6. In a general way the sanitary conditions in this city are poor. Inspection of premises was the rule.

7. From my own option, 105 sanitary inspections were made. Complaints were mostly due to defective plumbing, causing, no doubt, in several cases, such diseases as typhoid fever and diphtheria.

8. Several unsanitary localities in this city are known, and for that reason I am attempting to have a board of health established here.

9. All public nuisances, unsanitary premises, etc., are reported to the city council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this city.

11. The Central Falls, Citizens, Pawtucket, Saylesville, Seekonk, and Union Ice Companies, Telesphore Deshetres, Thomas Knowles, and the C. H. Perry Ice Company are the ice dealers of this city.

1. PROVIDENCE.

2. Superintendent of health, Charles V. Chapin, M. D.; vaccinating physician, Charles H. Leonard, M. D.; medical inspector, Eugene P. King, M. D.

3. The following extracts from Dr. Chapin's report will fully answer all questions in circular No. 132:

GARBAGE.

During the year the "swill and house offal" was collected by Messrs. A. H. & J. Barney under a temporary arrangement at the rate of $15\frac{1}{2}$ cents per capita. The amount paid has been \$2,299.17 per month, the population being estimated at the time the agreement was made at 178,000. This makes the annual payments \$27,590.04. The contractors use from 20 to 22 two-horse wagons, and it is estimated that about 16,000 tons of garbage are collected annually.

During the year 486 complaints were received from householders in regard to the removal of their swill, or in regard to articles supposed to be lost in it. Most of these complaints were due to failure to report return home after absence, or to the putting of ashes or other improper matters in the swill.

A small amount of garbage is collected by farmers who receive a special license for this. There are also a considerable number of farmers who purchase swill from the contractors and draw it out into the country to feed to swine. Each person is required to have a license for this, and to carry the swill in a tight box closely covered. In all 127 of these licenses were issued during 1901. These licenses run from April 1st to April 1st. This change in the date for granting licenses was made so that it might not be necessary to repair and paint the wagons for inspection during the bad weather of winter.

At the time when the health department was established in 1856, the present plan had been followed for a number of years of making a contract for the removal of swill, as it was called, with a single responsible party. The price had varied from \$800 to \$1,600. The then Superintendent of Health believed that an economy could be effected; and, at the same time, better results secured by making contracts with several parties who could collect from a single district, usually a ward. This plan was followed until 1868, but did not prove satisfactory, as indeed it never has in any city where it has been tried. The collections became worse rather than better. The compensation was usually small, rarely over \$50 per ward. The amounts expended were as follows:

1857—\$358	1858—\$150	1859—\$425	1860—\$243.74	1861—\$106.26
1862—none	1863—\$104.17	1864—\$283.33	1865—\$212.50	
	1866—none	1867—none		

For a period of three years the farmers removed the garbage for nothing, making their profit from the swine which they fed with it. In 1868, a contract was made with the A. & W. Sprague Mfg. Co., under which they agreed to remove the swill without cost to the city. This they did satisfactorily until their failure in 1873. It is said, however, that they lost a very considerable sum of money

through this contract. From 1874 until 1879 Messrs. A. E. Field & Son collected the garbage and received for it the following sums:

1874—\$3,500	1876—\$6,000	1878—\$7,150
1875—\$6,100	1877—\$6,600	1879—\$6,600

These parties had worked for the Spragues and removed the swill in the same manner, in two-horse wooden covered wagons. On May 1, 1879, they entered into a ten years' contract to collect and remove the garbage from the city for \$6,600 per annum. But as a result of their representation that they were losing money, their compensation was increased in April, 1884, to \$9,000 per annum, again in July, 1885, to \$12,000, and in April, 1888, to \$14,500. On the expiration of their contract, April 30, 1889, they demanded \$24,000, but a five-year contract was made with A. H. & J. Barney to remove the garbage at the rate of 15½ cents per capita, per annum, the population to be estimated by the City Registrar each year. Their first payments were at the rate of \$19,684.05 per annum. This firm had two five-year contracts, and since May 1, 1899, have collected and removed the garbage under short term agreements. Except for a period of a little over four years the garbage has been hauled out of the city and used for feeding swine. It is possible for a person to pay something for garbage, haul it several miles into the country and make a profit by feeding to swine. In some cases the profit from the swine will pay for the collection, if it is from a small district. It is only when hog raising is conducted in a small way, in conjunction with other farming operations that this is true. The experience of Providence and a large number of other cities shows that the cost of collecting garbage from a city cannot be met by the profits from raising swine on the garbage. The evidence from the experience of these cities is equally conclusive that this method of garbage disposal is the only one which does not place a financial burden upon the city for disposal, in addition to that for collection. This method besides costing nothing for disposal, often serves to diminish or partly defray the cost of collection. Thus in 1901, the cost of collection in a number of New England cities which collect the garbage by their own employees, was as follows: Boston, 20 cents per capita; Cambridge, 29 cents, Brockton, 19 cents; Lynn, 19 cents; Springfield, 20 cents; Somerville, 20 cents; Worcester, 15 cents. While in the following cities where it is collected by contractors who feed it to swine, the cost is in Fitchburg 9 cents per capita, in Haverhill, 7 cents; in Portland, 10 cents; in Holyoke, 2 cents; and in New Haven, 5 cents. Moreover, in Worcester where the city raises swine on the garbage, the cost was by this means reduced to 4 cents per capita, and in Brockton by raising swine and the sale of garbage to 8 cents per capita. In a number of cities the cost of collection is partially defrayed by the sale of garbage.

Thus in 1901 Lowell sold \$2,833.20 worth of garbage; Somerville, \$1,100; Brockton, \$1,232.84; Lynn, \$3,788.82; Cambridge, \$8,016.17; and Springfield, \$1,333.53.

Objection is frequently made that the disposal of garbage by feeding to swine is "unsanitary," that it is a nuisance, and dangerous to health. Various propositions have from time to time been considered in this city for changing our method of disposal on account of its danger to health, or because of alleged nuisance. There are a number of ways of disposing of garbage. It may be deposited on dumps, thrown into the bay, or ocean, ploughed into land, fed to swine, "reduced," that is the grease extracted, and the residue dried for fertilizer, or lastly it may be cremated. The first three methods cannot be made use of in Providence without causing great nuisance, and would not be tolerated for a moment. Reduction and cremation are expensive. The various schemes proposed would cost from \$10,000 to \$20,000 more than we are now paying. It would therefore be great folly to change unless such change was absolutely necessary. This is particularly true of a time when there does not appear to be money enough to properly care for smallpox and diphtheria, to provide for the medical inspection of schools, or to maintain a public bath or public comfort station. If our present method of sending our garbage into the country to be fed to swine could be shown to injure our own health, or that of our neighbors, it would be another matter. But our knowledge of the mode of transmission of the communicable diseases shows us that we have nothing to fear from this source. Feeding garbage to swine will not cause disease, either in Providence or in the towns to which it is removed. In an experience of 19 years, I have never found a case of sickness that could be thus explained. And my distinguished predecessor the late Dr. Snow, who could scent disease in decay, if anybody could, never considered this a dangerous method of disposal. In a report on garbage disposal presented by a joint special committee of the city council Dec. 16, 1901, there was offered a large amount of testimony from New England cities to show that disease had never been traced to the feeding of garbage to swine. In passing, it may be mentioned, that the New England cities which are far ahead in sanitary matters feed more garbage to swine than all the rest of the country together.

As regards nuisance, the feeding of garbage to swine as usually conducted, is productive of some nuisance; sometimes of great nuisance. But so are other methods of garbage disposal. I have personally inspected many methods of garbage disposal and would unhesitatingly affirm that there is less nuisance from the hog farms of Providence, Worcester, and Brockton than from the crematories of Montreal, Trenton, and Norfolk, or the reduction works of Boston and Buffalo. At their worst, hog farms affect comparatively few people; while crematories and rendering works, which must necessarily be located in the city itself, affect

very many people. It would be foolish, indeed, to spend annually a large sum of money to transform a possible nuisance in a country town into a certain nuisance in the heart of our own city. I furthermore feel sure that if the care and attention were bestowed on hog raising that has been given to reduction and cremation, the former could be conducted with practically no nuisance and with much greater profit than at present.

There is, however, one change that could be made in our method of garbage collection, which, though involving some expense, would, I believe, meet with the hearty approval of all our citizens. If the garbage could be collected daily in hot weather, householders would be relieved of a very considerable nuisance, which now seems unavoidable.

BOARDING HOUSES FOR INFANTS.

These boarding houses are required to take out licenses annually by Chapter 464 of the Public Laws (20 May, 1897). They must also be inspected annually by this department. Eighteen licenses were issued in 1901 authorizing the receiving of 42 children. The largest number in any one house was four.

There are no baby farms in the ordinary acceptance of the term in the city, that is there are no places where large numbers of children are kept together under poor surroundings and with neglect of all sanitary precautions.

LODGING HOUSES.

The exceedingly bad condition of the lodging houses in this city was set forth in my last report. As was then stated, they are not only a moral and social evil, but they are a direct menace to health, for they are very likely to receive infection from other cities and offer an excellent opportunity for its extension here. Of the 48 cases of small-pox in this city last year, 10 were in lodging houses. Previous to my report on this subject, action had been taken by the city council, and legislation asked for, and the following statute was enacted:

CHAPTER 1014 OF THE PUBLIC LAWS.

AN ACT TO REGULATE PUBLIC LODGING HOUSES IN THE CITY OF PROVIDENCE.

[Passed March 28, 1902.]

SECTION 1. Every building or part thereof in the city of Providence, in which ten or more persons are lodged for a price for a single night of twenty-five cents or less for each person, shall be deemed a public lodging house within the meaning of this act.

SEC. 2. The board of police commissioners for said city may license persons to keep public lodging houses in said city. A fee of one dollar shall be charged

for such license, and it shall expire on the first day of February next after the granting of the same, but no fee shall be charged for such license in case such building or part thereof is licensed as a tavern. Every such license shall specify the street or other place, and the number of the building, or give some other particular description thereof, where the licensee shall exercise his employment; and the license shall not protect a person exercising his employment in any other place than that so specified.

SEC. 3. No such license shall be granted until the inspector of buildings of said city has certified that the building or part thereof to be used as such public lodging house is provided with sufficient means to escape in case of fire.

SEC. 4. No such license shall be granted until the superintendent of health of said city has certified that the building or part thereof to be used as such public lodging house is provided with a sufficient number of water closets, and also has good and sufficient means of ventilation; and said superintendent may from time to time require the licensee to thoroughly cleanse and disinfect all parts of such public lodging house, and the bedding, furniture, and other property used therein, to the satisfaction of said superintendent, and the licensee shall comply at once with any such requirement.

SEC. 5. In every public lodging house a register shall be kept, in which shall be entered the name and address of each lodger, together with the time of his arrival and departure, and such register shall at all times be open to the inspection of the police.

SEC. 6. The keeper of every public lodging house shall at all times, when required by any officer of the health department or police department of said city, give him free access to said house and any part thereof for the purposes of inspection or other purposes of this act.

SEC. 7. The board of aldermen of said city, acting as the board of health for said city, may prescribe from time to time sanitary rules and regulations, subject to which such public lodging houses shall be conducted.

SEC. 8. Whoever keeps a public lodging house, or is concerned or in any way interested therein, without being duly licensed as hereinbefore provided shall upon conviction thereof, be fined not exceeding one hundred dollars; and any keeper of a public lodging house who violates any of the provisions of this act, or any such rules or regulations of said board of aldermen, shall, upon conviction thereof, be fined not exceeding one hundred dollars. In case any such licensee shall violate any of the provisions of this act, or any such rules or regulations of said board of aldermen, or shall fail to comply with any such requirement of said superintendent of health, said licensing board may immediately revoke his license.

SEC. 9. This act shall take effect from and after the 1st day of June, A. D. 1902.

In accordance with the provisions of this act the following rules were adopted by the Board of Aldermen:

RULES CONCERNING LODGING HOUSES.

[Adopted by the Board of Alderman July 17, 1902.]

RESOLVED, That all public lodging houses in the city of Providence, as defined by Chapter 1014 of the Public Laws, entitled "An Act to regulate Public Lodging

Houses in the City of Providence," passed at the January Session, A. D. 1902, shall be conducted subject to the following sanitary rules and regulations, which are hereby prescribed:

1. All floors and stairways must be sound, smooth and either painted or shellacked.
2. Open and spacious dormitories will be preferred.
3. There shall not be less than two horizontal feet between the sides of any two beds.
4. All bedsteads must be single and of iron; sleeping on wooden benches shall not be permitted.
5. Mattresses, pillows and bed clothing must be kept clean to the satisfaction of the Superintendent of Health.
6. Mattresses must be covered with a waterproof covering.
7. No person shall be allowed to sleep or to lie or to sit on the outside of any bed in his day clothing.
8. No person who is not clean shall be allowed to retire without a bath.
9. The floors of water closets must be made waterproof to the satisfaction of the Superintendent of Health; and every lodging house must be furnished with one or more lavatories, and a shower bath with hot and cold water, or other suitable means for bathing satisfactory to the Superintendent of Health.
10. All movable receptacles for excretions are prohibited.
11. Smoking in sleeping rooms is prohibited.
12. A reliable person or persons must be in attendance at all hours of the night.

Witness:

WILLIAM E. CLARKE,

City Clerk.

DISINFECTION.

Disinfection after communicable disease in the city is not compulsory, and is only done at the request of the family. It is done by this department without charge.

Formaldehyde disinfection has been done in nearly every instance. A modified Chicago method is followed. In some of the houses sheets are hung up and sprayed exactly as in Chicago, but in a large proportion of cases the spray is applied to the carpets, rugs, hangings, bedding, etc., that may happen to be in the room, all of which are spread out as freely as possible. Occasionally goods are removed from the house for steam sterilization. Corrosive sublimate and formalin are left at nearly every infected house with directions as to their use.

A little more attention was perhaps given to disinfection after small-pox than after other diseases. In nearly every case all the infected bedding and clothing was burned or treated with steam. Also special attention was given to the application of corrosive sublimate to floors, woodwork, and furniture. In some cases this was left to the householder, and in others it was done by a woman employed by this department. In the lodging houses the floors were sprinkled

with a watering pot. In the lodging houses and on the steamer Essex, no gaseous disinfection was employed, but reliance was placed on corrosive sublimate and the treatment of the bedding and clothing.

In twenty-one instances formalin was used by spraying upon sheets, floors, or bedding. In seven cases sulphur fumigation was relied on. In no instance did any case of the disease afterwards arise which could by any possibility be attributed to lack of disinfection.

VACCINATION.

During the year 1902 the number of persons vaccinated was 10,665. The only public vaccination has been at the Fourth Ward Room on Fountain Street Friday afternoons. The use of humanized virus which had hitherto been chiefly employed, was discontinued early in 1901 and glycerinized virus furnished by the Health Department of the city of New York has since been used. The number of certificates of vaccination issued was 3,558.

QUARANTINE.

The following is the number of vessels hailed by the signal officer:

1893 (from May 18).....	98
1894.....	82
1895.....	82
1896.....	106
1897.....	90
1898.....	78
1899.....	414
1900.....	91
1901.....	115
1902.....	125

The following is a list of the vessels boarded by the health officer, and the places from which they sailed:

	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
British Provinces..	14	2	0	0	1	0	0	0	0	0
West Indies.....	11	14	18	10	9	8	10	10	5	47
Italy.....	1	2	2	2	0	1	0	0	0	0
South America.....	1	0	0	0	0	0	0	0	0	0
Turkey.....	0	0	0	0	1	1	0	0	0	0
Russia.....	0	0	0	0	0	1	0	0	0	0
United States.....	3	0	0	0	0	1	7	0	0	0
Azores and Cape Verde Islands....	0	0	0	0	0	0	0	1	4	3
Africa.....		0	0	0	0	0	0	0	0	1
Great Britain.....	0	0	0	0	0	0	0	0	0	3
Total.....	30	18	20	12	11	12	17	11	9	54

As is shown in the above table many more foreign vessels were inspected in 1902 than ever before. This was due chiefly to the establishment of a regular line of steamers between Jamaica and this port. This enlarged foreign commerce called renewed attention to quarantine and was the cause of a resolution of your board on June 9, asking if any additions or amendments to the quarantine statutes and rules were necessary or advisable. At that time I reported in substance that, while there were many obsolete provisions in the quarantine law, and that it failed to recognize the progress that had been made in preventive medicine during the past twenty-five years, yet with a liberal interpretation of the law and with the assistance of the federal statutes, maritime quarantine is administered at this port so that this city is protected as well as are other seaport cities. It would be possible to make our quarantine regulations more in accord with modern conditions and to remove certain inconsistencies which now exist. This, however, can only be done by a revision of the State laws relating to this subject. Theoretically this should be done, but whether it is actually necessary or advisable will be best determined by the committee on ordinances of the city council to whom this matter was referred.

In administering maritime quarantine at the present time several things should be borne in mind:

1. Owing to rapidity of communication between different parts of the world, the presence of United States consuls in almost every port, the existence of a responsible sanitary organization in almost every port, the dissemination of information of outbreaks of disease by the daily press, as well as by the weekly

reports of the marine hospital service, render our knowledge of the sanitary condition of foreign ports very accurate. Formerly every foreign vessel, and most vessels from distant domestic ports were under suspicion. Formerly we could know of the existence of an epidemic in a foreign port, only by means of a slow sailing merchantman which, perhaps, would bring the disease itself at the same time with the news of the outbreak. To-day we are usually as sure of the sanitary condition of a foreign port as we are that of Newport, New York, or Baltimore. As we ordinarily have nothing to fear from domestic ports so we usually have nothing to fear from most foreign ports, and we would be informed as promptly and certainly of yellow fever in Jamaica as in Brunswick, Ga. I consider it still necessary that every foreign vessel should be inspected, as is indeed required by the federal rules, but in applying these rules we should remember that the actual danger of importing disease into Providence by foreign vessels is no more, and in most cases is less than is the danger of its importation by vessels from New York, or Newport News. And the danger of such importation at the present time is only a fractional part of what it was 150 years ago when our quarantine legislation and methods had their origin. Within my recollection there has never been a case of communicable disease brought here in a foreign vessel, but small-pox has been brought here several times on vessels from Baltimore and Norfolk; in every instance on vessels not subject to quarantine.

2. In determining the strictness with which maritime quarantine should be enforced it must be borne in mind that at the present time the danger of importing disease by rail is very much greater than by sea. Far more people enter the city by land than by water. We are in rail communication not only with all parts of the United States, but also with Canada and Mexico. Far more disease has been brought to us by rail than by water, and it is likely to be so in the future. Yet ordinarily no restriction is put upon this mode of communication and it would be impracticable to attempt it.

Just now smallpox is prevailing in many cities with which we are in close rail communication, as for instance Boston, but it does not happen to be at all prevalent in any of the ports from which we are likely to have foreign arrivals. Bubonic plague has existed for two years or more in San Francisco, and people and goods are continually passing from that city to this without restriction.

3. Our knowledge of the mode of transmission of the communicable diseases has been greatly increased during the last few years. Formerly it was believed that cargoes and the structure of the vessel itself might bring disease into a port and that infection might even be blown by the wind from a vessel to the shore, hence the ancient provision still in our statutes that vessels subject to quarantine must anchor at least one mile from any public landing place, and the explicit directions for disinfecting cargo and cleansing the ship. But we now know that

ships and cargo do not become infected. It is the people on the ship not the ship which is to be feared. The only possible danger in having a vessel come directly to the wharf for inspection is that an infected rat might escape from a plague ship or an infected mosquito from a yellow fever vessel. The chance of this happening before the hatches are removed and the cargo disturbed are slight indeed, many times less than the danger of infection by rail with these diseases. It can safely be ignored. The complete destruction of rats or mosquitoes on a vessel is no easy matter, and is never even attempted unless the ship is known to be infected. In New York, Boston, and other ports, even those in the South, vessels are permitted to come to the wharf and discharge without reference to the vermin on board, though, of course, there is a possibility of a vessel carrying infected rats or insects even though there are no infected persons on board. It has been well said that "quarantine is a sieve not a dam." If the attempt is made to make it a dam the flood of commerce will surely break it. It is certainly unwise and unreasonable to place undue burdens upon commerce by water when the more dangerous rail traffic is entirely unrestricted. What is needed in this port is a prompt inspection of every foreign vessel and it makes no difference whether this is done at the wharf or in the stream. If no sickness is found, permission to enter is at once given. If sickness is found the Superintendent of Health has ample power to properly handle it.

CONTAGIOUS DISEASE HOSPITAL.

The contagious, or "city ward" of the Rhode Island Hospital was built by the city on the grounds of the Rhode Island Hospital, and was opened January 13, 1896. The ward is maintained by the Rhode Island Hospital, and the city pays \$15 per week for every patient sent to the hospital by this department. During the year there were removed to the hospital under my direction 105 cases, and the total expense to the city for caring for them was \$4,442.18.

The Rhode Island Hospital first began to receive patients with scarlet fever and diphtheria in 1891, and the following shows the number of cases admitted since that time, and also the number of deaths that occurred in the hospital. For 1902 this does not include the cases which developed in the general wards of the hospital or cases which were brought in from outside the city. There were five cases of diphtheria from outside the city treated in the hospital, and sixteen cases of diphtheria and four of scarlet fever which originated there.

YEAR.	SCARLET FEVER.		DIPHTHERIA.		Total Cases.	Expense.
	Cases.	Deaths.	Cases.	Deaths.		
1891.....	6	0	4	1	10	\$486.43
1892.....	13	2	4	1	17	1,553.36
1893.....	20	1	5	1	25	1,267.77
1894.....	27	2	4	2	31	2,297.07
1895.....	37	0	27	3	64	3,614.78
1896.....	35	2	103	10	138	4,679.64
1897.....	22	2	57	6	79	4,924.35
1898.....	21	2	70	6	91	3,404.74
1899.....	40	2	47	3	93*	4,390.06
1900.....	49	1	87	10	157†	6,943.61
1901.....	37	2	115	20	153‡	5,039.58
1902.....	24	4	80	11	105§	4,442.18
Totals.....	331	20	603	74	963	\$43,043.57

*Measles, 6.

‡Measles, 1.

†Measles, 21.

§Measles, 1.

INFECTIOUS DISEASES.

Typhoid Fever.

Of the typhoid fever reported in the city during the year, eighteen cases, of which seven died, were probably contracted outside of the city.

In thirteen instances there was more than one case in a house; in one house there were seven cases; in four houses, three cases; and in eight houses there were two cases in each. Of these twenty-two secondary cases it appeared from the time of attack that five were not due to infection from the first case. The remaining seventeen, including the six extra cases in one house, were very likely due to such direct contagion.

The State Board of Health offers to examine the blood of typhoid suspects by the Widal test, but of the 160 cases reported during the year only twenty-six were subjected to the test, twenty-one of which proved to be positive. In one instance the test was negative first and then positive. In four cases reported as typhoid only a single negative test was reported. There were also forty-one other negative tests reported to this department by the State Board of Health from cases not reckoned as typhoid.

It has recently been learned that typhoid fever is sometimes transmitted by oysters, and sometimes by celery, lettuce, etc. Oysters which have been in water badly polluted with sewage may take up the typhoid germs from the water, and thus be the means of causing the disease. Again it has been found that growing celery may be infected by means of nightsoil used as a fertilizer, and thus become the cause of an outbreak of typhoid fever. The source of the typhoid that occurs in this city is usually unknown; during the past year an effort has been made to see if any of it could be traced to the sources above referred to. But no evidence pointing to this was obtained. Of ninety of the patients who replied definitely as to whether they had eaten celery, lettuce, or other raw vegetables within two or three weeks of their attack, sixty-two replied in the negative, and twenty-eight in the affirmative, but in no case could any clue be found to a possible infection. Of ninety-two patients, nine confessed to eating raw oysters while eighty-three said they had not.

Diphtheria.

Besides the cases which were recorded as diphtheria, there were six cases of membranous croup and six of other forms of laryngitis, all resulting in death, which came to the knowledge of this department. It is probable that most of these cases were really diphtheria, and if reckoned would considerably increase the mortality from that disease. All of the cases of membranous croup were placarded with a *membranous croup* sign and were treated as if contagious. In none of these cases were any cultures taken.

There were reckoned as diphtheria 157 cases in 114 families in none of which diphtheria bacilli were found. Some of these were doubtless not diphtheria, but the attending physician reported them as diphtheria, and in 136 of the cases no culture was taken for diagnosis. In the other twenty-one cases cultures were taken which proved to be negative. In sixteen of these cases only one culture was taken, and in six of these death occurred before another culture could be taken. In two instances two negative cultures were obtained, and in one instance, three, in one instance four, and in one instance five negatives were taken. Of the 157 cases where no positive cultural results were obtained, thirty resulted fatally, and doubtless the serious condition of the patient and the positive character of the clinical symptoms were reasons for the failure of the physician to take a culture.

There were 43 other cases in which the physician did not consider it necessary to take a culture for diagnosis, but in these cases or in their families diphtheria bacilli were afterwards found. There were thus in all 179 cases of diphtheria in which the attending physician did not avail himself of the aid of bacteriology in

making his diagnosis. This was thirty-three per cent. of all cases. The year before, it was nineteen per cent.

There were in the families where diphtheria bacilli were found a number of persons who were sick with the symptoms of the disease, but yet in whom no diphtheria bacilli were found or were not found on the first examination. In one instance there were three successive negatives although there were other cases known to be diphtheria in the family, and under the same circumstances there were three instances in which two negatives were obtained, and fourteen instances where one negative only was obtained. No subsequent cultures were taken from the above cases, but they were all doubtless true diphtheria. There were also two instances in which two negatives were followed by a positive, and eleven instances in which a single negative was followed by a positive. All of the cultures referred to in this paragraph were for diagnosis and taken early in the disease.

In 1902 there were examined by the State, city and hospital laboratories 3,162 cultures. Of these 172 were taken for scientific purposes, and the remainder were taken in the ordinary course of department work. Eleven were from scarlet fever cases of which none were positive.

The following shows certain facts in the natural history of diphtheria:

	1889-90.	1891-95.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	Totals.
Number of families in which there was more than one child.....	233	574	433	326	161	107	194	310	299	2,637
Number of these in which there was more than one case.....	89	179	172	125	57	35	60	104	75	896
Number of children in all the above families.....	894	1,614	1,690	1,262	642	458	756	1,138	1,113	9,567
Number of these children who were attacked....	422	750	793	578	287	191	319	470	440	4,250
Number of additional families with children in the same house.....	97	329	323	254	119	79	131	215	224	1,771
Number of children in these families.....	262	854	898	665	311	199	359	591	640	4,779
Number of these additional families attacked.	18	24	30	9	11	2	5	17	10	126
Number of children in these families who were attacked.....	25	28	55	26	12	7	6	23	14	196
Number of tenements which were disinfected where there were other families with children in the house.....	23	108	192	188	82	59	80	124	155	1,011
Number of instances of the above where the disease spread to other families in the house...	5	10	11	9	11	1	0	1	1	49

	1889-90.	1891-95.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	Totals.
Number of well children who were at once re- moved.....	54	202	141	176	71	57	73	106	69	949
Number of those who were attacked on their re- turn.....	2	7	0	3	1	0	0	2	0	15

As in previous years the safety of other families in the infected house is shown to be very great. In only ten of 224 instances did the disease extend beyond the first family attacked. In five of these cases infection took place before the nature of the disease was recognized. In two cases it was after the card had been removed from the first case—in one a month after—and was quite as likely to have been contracted elsewhere. In one instance the cases in the two families were taken sick on the same day. This leaves only two instances out of 224 in which diphtheria spread from one family to another by careless communication after the house was placarded. There were also eleven children in six "other families in the house" with diphtheria, in whom diphtheria bacilli were found, although they were not sick. Infection in these cases also generally took place before the diagnosis was established. It has been abundantly proved in this city that except in a very small number of cases, the placarding of the house is sufficient to prevent intercourse with the infected family, and the spread of contagion to others in the same house.

It is the custom of this department not to exclude from school, children in the house, except those of the family in which the disease actually exists. If, however, it is believed that there will be no isolation, and there will possibly be a mingling of all the children in the house, they are all excluded. This, however, is not done in more than one-quarter of the cases. The children in the non-infected families are not generally allowed to go to school until a negative culture has been obtained from the throat. Of ninety-three children who were thus examined in 1902, fourteen showed the presence of diphtheria bacilli. During 1902 permits were given to seventy-three children living in thirty "infected houses," but not in infected families, to attend school. During the past seven years the figures are 421 children in 142 families. In none of these did the disease develop, which indicates that it is quite safe to permit children in the infected house, but not in the infected family, to attend school, except in those cases where manifestly no care is taken.

During the year sixty-nine well children were sent away from home to avoid the disease. Three were attacked within a day or two after leaving home, and four were after leaving home found to be infected with diphtheria bacilli though they were at no time sick. All seven were at once sent home. None of the other sixty-two children were attacked on their return home.

Of eighty cases which went to the hospital, there was one instance where members of the family were attacked after the return of the patient. A man went to the hospital January 23d, after ten days' illness. He was discharged February 1st after two successive negative cultures from throat and nose. On February 22d an adult member of his family was taken sick with diphtheria, and on February 23d two other members. The infection may have remained with the first case, notwithstanding the two negative cultures, or it may have been latent in one or more of the family from none of whom cultures had been taken before their sickness.

Persons were removed to the hospital from forty-three families, in which there remained 104 children who were well at the time of removal. Of these, one was taken sick in two days, one in six days, and one in seven days after removal, and four others showed the presence of diphtheria bacilli several days afterwards, but were not sick.

For five years it had been the rule in this department to keep the warning sign on the house in cases of diphtheria until a negative culture had been obtained from the throat of every member of the family. On March 3, 1902, this rule was changed chiefly for two reasons:

First. It caused an immense amount of friction, and called forth much hostility to this department, both on the part of the infected family and the attending physician. To very many it seemed very unreasonable that a well person should be capable of causing sickness in others. When the bacilli remained in the throat for a considerable time the trouble greatly increased, and if a wage-earner happened to be thus confined when he felt perfectly able to go to his work, it became almost impossible to keep him at home. This requirement of the health department did not generally meet with the approval of the medical profession, and it seemed impossible to enforce it much longer.

Second. This requirement was the more willingly given up because, although it doubtless prevented the spread of the disease in a considerable number of cases, it did not entirely secure the desired end. A single culture from the throat is not enough to determine with sufficient accuracy the presence or absence of diphtheria bacilli. The margin of error is very considerable. Two successive negative cultures from both nose and throat have been shown by Dr. H. W. Hill, of Boston, to be necessary if one wishes to reduce the limit of error to one or two per cent. Of course this would result in a still longer isolation of well persons, and create more opposition than the method formerly pursued here. If it was impossible to require a single negative culture from the throat, it would certainly be impossible to require two negatives from both throat and nose. Yet the latter is necessary if we wish to be reasonably sure that a person is free from infection.

It may be asked why any isolation is attempted in diphtheria if a considerable

number of persons carrying diphtheria bacilli are at large, and likely to give the disease to others. One reason why it is advisable to isolate those who are actually sick with the disease is that such persons are probably producing very many more germs, of a very much more virulent character, than are well persons who have bacilli in their throats. The isolation of sick persons appears to the public to be a reasonable precaution, and they are willing to submit to it. In sanitary practice what is theoretically desirable can rarely be carried out to the letter. Sanitary rules must, on the whole, meet with public approval, and the isolation of the sick does. Moreover, experience has shown that the isolation of the sick, chiefly secured by placarding the house or removal to the hospital, does accomplish considerable in preventing the extension of the disease. We are as yet far from stamping out diphtheria, at least in cities, but the number of serious cases of this disease has certainly been reduced.

At present the placard in diphtheria is kept up for ten days from the disappearance of the membrane, as certified to by the attending physician, on a postal card sent to him for that purpose. Children in the family are not allowed in school and are kept on the premises if possible. Wage-earners are, as a rule, allowed to remain at work. Teachers, letter carriers, waiters, etc., are usually required to go away from home or give up their work. As was stated above, restrictions are not, as a rule, put on other families in the house, except that in some cases the children are kept out of school. As it seems to be possible to prevent becoming infected even when mingling with diphtheria cases, and for a person who is infected to keep from infecting others, simple directions to secure these ends have been printed and are given to the adults in all diphtheria families. The following is the form used:

NOTICE.

TO MEMBERS OF THE FAMILY IN WHICH THERE IS DIPHTHERIA.

Keep away from the sick person as much as possible. If you do have to touch the patient, wash your hands at once.

Even with the best of care you are liable to get the germs in your nose or throat, although you may not be sick yourself.

Then, if you are not very careful, you may give the disease to others.

Take care of your spit. Don't spit on floor, on sidewalk, or any such place.

Don't drink out of a glass or cup that someone else is likely to use.

Don't put money, pencils, pins, etc., in your mouth.

Don't borrow or lend a pencil, pipe, or anything else that is put in the mouth.

Keep your fingers out of your mouth.

Don't kiss your own or other children.

The oftener you wash your face and hands, the less likely you are to carry the disease.

Always wash your hands the last thing before leaving the house.

During the five years that the throats of all members of diphtheria families were examined, a table was given showing the percentage of well persons in such families infected with diphtheria bacilli. As these routine examinations have now been given up that table is omitted from this report.

SCARLET FEVER.

The following table gives the results of my observations during the past sixteen years concerning certain points in the etiology and prevention of scarlet fever. This table for the years previous to 1892 does not include all the families and cases:

	1887-90.	1891-95.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	Totals.
Number of families in which there was more than one susceptible child.....	615	1,600	305	174	178	267	215	171	137	3,662
Number of these in which there was a second case.....	334	711	128	58	68	90	72	51	41	1,553
Number of susceptible children in all the above families.....	2,270	5,571	1,032	644	655	992	758	573	512	13,007
Number of these children who were attacked....	1,194	2,935	526	318	322	477	401	259	208	6,640
Number of additional families with susceptible children in the same house.....	273	817	197	132	113	206	174	122	104	2,138
Number of susceptible children in these families.....	799	2,259	545	340	295	628	412	310	230	5,818
Number of these additional families attacked.....	45	94	16	6	7	5	7	4	3	187
Number of children in these families who were attacked.....	81	157	41	9	12	9	14	5	3	331
Number of tenements disinfected where there were other families with susceptible children in the house.....	119	374	139	86	84	137	115	84	79	1,217
Number of above where the disease spread to other families in the house.....	10	9	10	0	7	0	2	0	0	38
Number of susceptible children who were at once removed.....	60	374	174	106	82	134	76	83	49	1,138
Number of these who were attacked on their return.....	4	20	5	0	4	0	4	1	0	38

	1887-90.	1891-95.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	Totals.
Number of children who were exposed and who had previously had scarlet fever.....	278	112	62	63	73	55	68	42	753	
Number of these who were attacked a second time.....	40	20	3	12	10	4	4	6	99	
Number of adults who were exposed and who had previously had scarlet fever.....	541	120	79	87	155	184	112	74	1,352	
Number of these who were attacked a second time.....	10	1	0	1	0	3	1	1	17	

Of forty-nine well children who were removed from their families, none were attacked on their return.

A child ten years old went to the hospital from 62 Crary street, September 9th, two days after the beginning of an attack of scarlet fever. He remained in the hospital till October 17th, or a little over five weeks from the date of attack, and at this time all desquamation had ceased. He then returned home. On November 2d another child in the family, aged seven years, was attacked with the disease.

Eighteen cases of scarlet fever were removed to the hospital from families in which were thirty-eight other children. Of the children left behind one was taken sick in one day, one in two days, and one in twelve days, and after that these families remained free from the disease.

SMALLPOX.

On Dec. 23, 1901, a case of smallpox was discovered in a lodging-house on South Main street, and the city was not again free from the disease until Sept. 23, 1902. The hospital was again opened for a case November 16th, and this patient died November 25th. There was also a case concerning which the diagnosis was doubtful, but which was finally believed to be smallpox, which did not go to the hospital and was pronounced cured December 13th. This was the last case in 1902. In all there were forty-eight cases that year, the largest number which has occurred in any year since the extensive outbreak of 1873. For several years this disease has prevailed very extensively in the United States, and more extensively in New England in 1902 than in the preceding years. There were in Boston several hundred cases of the disease and many of our cases could be traced to that city. It also occurred in many other cities and towns of Massachusetts and Rhode Island. Most of the smallpox in this country has been of a very mild character, so mild that it has often been mistaken for other diseases, and the fatality has often been only one or two per cent., but in Boston the fatality in

1902 was about fourteen per cent. and this severer type of the disease was noticed in many other parts of New England. In Providence there were six deaths which gave a fatality of about twelve per cent. Probably the fatality in Boston, Providence, and other cities would have been less if the proportion of alcoholics attacked by the disease had not been so large. Many of our cases were exceedingly mild; some of them so mild that the diagnosis was not certain until the disease had run its course or another case had developed. In some of the cases there were not more than a dozen or twenty pustules and these not well developed. Although in these mild cases the patient often felt perfectly well after the eruption appeared, in every case but one the prodromal symptoms such as headache, backache, and fever, were well marked, the patient usually being incapacitated for work. The only exception was a case which, though reckoned as smallpox, was yet somewhat doubtful, and was believed by some who saw it to be chickenpox. It is also to be noted that several of these mild cases gave rise to a very severe type in others. In one instance the head of a family presented an exceedingly mild form of the disease. Three cases in his family contracted it from him; his wife was probably the mildest case we had, his brother's case was also mild, but there was considerable eruption which was entirely characteristic, the mother died of typical smallpox. It is the mild and not readily recognized cases which are the chief factor in the extension of the disease.

During the year 157 other cases were reported to the department as being possibly or probably smallpox. Most of these were seen at least once by two physicians, and many of them were seen several times. Thirty of them proved to be varicella, eighteen eczema, or some similar skin disease, fourteen acne, ten scabies, ten urticaria, nine impetigo, eight syphilis, five measles, three vaccinia, two each sudamina, insect bites and ivy poisoning, and one each, erysipelas, erythema, German measles, herpes, and rash due to indigestion. The other cases presented no eruption but were mostly some febrile attack in possible subjects. The Secretary of the State Board of Health has always been ready to assist in the diagnosis of smallpox in any part of the state, and as his office is in Providence, he has been frequently called on to see cases here, and his experience in smallpox, and his knowledge of skin disease has made his assistance in these cases of very great value.

On several occasions persons with smallpox had walked into the City Hall voluntarily or, in one case, had been sent in by a physician to have the diagnosis established. This was so disquieting to the officials in the building and to the public that a small building was placed on a vacant lot in the rear of the railroad station and the police provided with a key. It is furnished with a stove, bed, table, lamp, etc., and all told, cost less than \$150. It has been used three times for suspects.

Of the forty-nine cases of smallpox in 1902 the origin of six was absolutely unknown. A group of five connected cases occurred in a part of the city (India Point) where there had been smallpox a few weeks earlier, and it seemed likely that there had been one or more unrecognized cases in the interim. Another group of five cases occurred on P———— street. The first of these cases was in a house where there had been one or two cases of eruptive disease, the first of which was known to have been on a steamboat on which was a case of smallpox. These cases were not seen by department physicians, but the dates would permit of this being the source of the outbreak. Ten cases were connected with a jewelry manufactory. The source of this outbreak was unknown, but it was possibly connected with a young man who had had smallpox in the west about a month before. Three cases were traced to workmen on the India Point bridge, who came from Boston and died with the disease in East Providence. Three were in a family a member of which brought the disease from Everett, Mass. Six came from various places in Massachusetts, one each from New Hampshire, Virginia, Canada, Centreville, R. I., and Pawtucket, R. I. Five developed in lodging-houses from imported cases, and one in the Rhode Island Hospital from an imported case. There were in all thirteen importations of the disease and probably several more. Seven cases occurred in lodging-houses.

Not counting lodging-houses, institutions, etc., there were in smallpox infected families 119 persons. Of these fifteen contracted the disease. Of the 119 there were thirty-two who had never been vaccinated, of these seven or about twenty-two per cent. contracted the disease. Of the eighty-seven vaccinated persons, eight, or about nine per cent., contracted the disease. Of these eight cases, one, a boy of ten, had been unsuccessfully vaccinated four years before; the others had been vaccinated respectively 20, 30, 30, 40, 40, 60, and 70 years before. Thirty-four of these other vaccinated persons in these families were evidently susceptible, for they were successfully revaccinated at this time. The other forty-five vaccinated persons were revaccinated unsuccessfully.

In sixteen cases I was very positive as to the exact time of exposure and to whom exposed. In fifteen cases the person who communicated the disease was in the papulae, vesicular or early pustular stage, and in one case only, in the stage of desquamation. One reason why more cases are not traced to the desquamation stage is doubtless due to the fact that comparatively few known cases are at large during this stage. Therefore the above figures cannot be considered as indicating that the early stages are more likely to communicate the disease than are the later stages, but merely are evidence that the early stages are dangerous.

Of the forty-eight cases of smallpox in 1902, twenty had never been vaccinated, twenty-four were adults who had only been vaccinated many years before in early life. In three the vaccinal history was uncertain, but they had probably

been vaccinated in infancy. One of these cases had been vaccinated several times unsuccessfully, and in 1894 he was vaccinated, it was said, successfully, but this was uncertain. These two cases were the only cases which occurred in persons in whom there was the slightest evidence of recent vaccination.

In disinfecting after smallpox more care is exercised than in other diseases. In all cases the personal clothing and bed clothing of the patient is either burned or sterilized with steam. In every case also corrosive sublimate is used on woodwork and furniture. Sometimes this is left to the householder and sometimes a woman is employed by this department to do it. In lodging-houses I have usually drenched the floor, benches, and woodwork with corrosive sublimate or 40 per cent. formalin by means of a garden spray. In the lodging-houses, the City Hall, steamer "Essex" and three or four doctor's offices no gaseous disinfection was employed. In twenty-one instances formalin was used, being sprayed upon sheets as well as on the floor. In nine instances sulphur was used. In no instance was there any recurrence of the disease, nor was any case of smallpox traced to infected goods of any kind.

It is my policy to at once move all cases of smallpox to the isolation hospital at Field's Point. This was, however, not done in three instances. In two instances the diagnosis was too uncertain and in the third the patient was too sick in my opinion to permit of removal. When the cases were treated at home, medical attendance was furnished by this department, but as the families were in comfortable circumstances, they were required to pay for their groceries and other supplies. It was deemed advisable to guard the house and three men were employed for this, in shifts of eight hours at \$2 per day. A little watch-house was provided heated by a kerosene stove. It is not known that any cases were contracted from these houses after isolation was established, but on account of the irksomeness of the isolation, all the families agreed that they would much prefer to go to the hospital.

The smallpox hospital at Field's Point is a homely affair, but affords very comfortable accommodations for from twelve to fourteen patients. It was very fortunate that our forty-eight cases came along so that the hospital was at no time full. The Field's Point property was purchased a part in 1825, and a part in 1833, as a quarantine station and was used exclusively as such for many years. For a long time past, however, the end of the point has been leased for shore resort purposes, and the lessee, until 1892, was required to act as quarantine sentinel. The city has also let many lots for summer cottages. The hospital lot now contains only three or four acres and most of this is planted by the lessee of the point. This encroachment on the proper uses of the hospital property should never have been permitted, and this use of the hospital lot itself resulted in the development of a case of smallpox among the employees at the point. This lot

should be reserved exclusively for hospital purposes. The hospital which was built in 1864, at first a rough unfinished frame, was plastered, plumbed, and otherwise modernized in 1892. Twice the lead pipe was stolen from the building since then. There had always been a poor water supply until 1900, when city water was put in. No other repairs had been made since 1892, but after the hospital was closed in the fall of 1902 the plumbing was well overhauled, the walls whitened, some new floors laid, a new range put in, and many minor repairs made and electric lights installed.

In the case of "contacts" or "suspects," persons who have been exposed to smallpox, it has never been my policy to insist upon the restrictions that are placed upon them in many cities. As a rule, wage-earners are allowed to continue at work and are seen daily near the time they are likely to come down with the disease. This observation is kept up for seventeen or eighteen days. Children in the families where cases have occurred are kept out of school and are not, as a rule, allowed outside of their home yard. Of course every one in the family is always vaccinated as soon as the case is discovered.

THE TEACHING OF CLEANLINESS.

In my last report was printed a circular to teachers, calling their attention to the advisability of teaching personal cleanliness to their pupils as a means of preventing the spread of communicable disease. A similar circular was sent out this year, and also small slips of directions, one of which was given to every pupil in the public and parochial schools. The slip for the pupils is shown below:

REMEMBER THESE THINGS.

- Do not spit. Never spit on a slate, floor, or sidewalk.
- Do not put the fingers into the mouth.
- Do not pick the nose or wipe the nose on the hand or sleeve.
- Do not wet the finger in the mouth when turning the leaves of books.
- Do not put pencils into the mouth or wet them with the lips.
- Do not put money into the mouth.
- Do not put pins into the mouth.
- Do not put anything into the mouth except food and drink.
- Do not swap apple cores, candy, chewing gum, half eaten food, whistles or bean blowers, or anything that is put in the mouth.
- Never cough or sneeze in a persons' face. Turn your face to one side.
- Keep your face and hands clean; wash the hands with soap and water before each meal.

PROVIDENCE, December, 1902.

POPULATION.

Census, June 1, 1890.....	132,146
“ Jan. 1, 1893.....	148,944
“ June 1, 1895.....	145,472
“ June 1, 1900.....	175,597
Estimated July 1, 1902.....	181,000

AREA.

18.29 square miles.

ASSESSED VALUATION.

	1901.	1902.
Real estate.....	\$151,533,940.00	\$154,711,860.00
Personal estate.....	41,267,920.00	43,161,140.00
Total.....	\$192,801,860.00	\$197,873,000.00
Total amount of all tax.....	3,084,829.76	3,165,968.00

STREETS.

	1901.	1902.
Paved.....	32.39 miles.	32.52 miles.
Curbed and built, but not paved.....	156.96 “	159.57 “
Built, but not curbed.....	30.22 “	29.27 “
Received, but not built.....	13.28 “	14.31 “
Total.....	232.85 “	235.67 “

WATERS AND SEWERS.

Miles of water pipes.....	330.639*	335.755*
Number of service pipes in use.....	22,186	22,758
Number of meters in use.....	18,544	19,216
Average daily consumption of water.....	10,734,700 gals.	11,563,414 gals.
Miles of sewers.....	184,666	190,440
Number of sewer connections.....	16,277	16,832

1. SCITUATE.

2 Alberto E. Wood, health officer.

*Besides 5.69 for fire purposes.

3. The only contagious diseases reported during the year was one case each of diphtheria and small-pox.

4. Isolation was not maintained.

5. None of the sick were isolated.

6. No inspections of premises where sickness prevailed were made.

7. One inspection of a privy vault in Rockland village was made.

9. Public nuisances and unsanitary premises are not reported to the town council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. Allen Barber, A. L. Wood, and William F. Angell, of North Scituate, and R. B. Rounds, of Rockland, are the ice dealers of this town.

1. SMITHFIELD. No report from the health officer.

1. WOONSOCKET. No report from the health officer.

WASHINGTON COUNTY.

1. CHARLESTOWN.

2. Milton Duckworth, M. D., health officer.

3. There were no epidemics in this town during the year.

4. Isolation was maintained.

5. All of the sick were isolated.

6. Inspections of premises where sickness prevailed were made, and sanitary conditions found to be fairly good.

8. No unhealthy localities in this town are known.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. John C. Tucker of Carolina is the ice dealer of this town.

EXETER has no health officer.

1. HOPKINTON.

2. H. H. Crandall, health officer.

3. Measles was quite prevalent during the months of October and November, there being 83 cases, none of which were fatal, however.

4. Isolation was not considered necessary.
5. None of the sick were isolated.
6. Inspections of premises where sickness prevailed were made, and sanitary conditions in the village of Ashaway, where the outbreak occurred, were found to be good.
7. No sanitary inspections were made during the year.
8. No unhealthy localities in this town are known.
9. All public nuisances, unsanitary premises, etc., are reported to the town council.
10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.
11. S. R. Avery & Company and W. R. Clarke, of Hope Valley, are the ice dealers of this town.

1. NARRAGANSETT. No report from the health officer.

1. NORTH KINGSTOWN.

2. Harold Metcalf, M. D., health officer.
3. Only a few isolated cases of contagious or infectious disease, including two of varioloid, were reported during the year.
4. Isolation was maintained.
5. All of the sick were isolated.
6. Inspections of premises where sickness prevailed were made and in some of the villages the sanitary conditions were bad.
7. From my own option I made sanitary inspections of premises where I was called to attend patients.
8. No unhealthy localities in this town are known.
9. All public nuisances and unsanitary premises are reported to the town council.
10. There has been, to my knowledge, no contamination of the water, milk or ice supplies of this town.
11. James A. Brayman and the Orpin Ice Company, of Wickford, John Maglone, of Allenton, and Rose & Artist, of Saunderstown, are the ice dealers of this town.

1. RICHMOND.

2. Charles A. Fuller, health officer.

8. I know of no unhealthy locality in this town.

9. All public nuisances, unsanitary premises, etc., are reported to the town council.

11. S. R. Avery & Company and W. R. Clarke, of Hope Valley, are the ice dealers of this town.

1. SOUTH KINGSTOWN.

2. Daniel T. Carr, health officer.

3. There were no epidemics in this town during the year. There were fifteen cases of typhoid fever, one of which was fatal, reported.

4. Isolation was not maintained.

5. None of the sick were isolated.

6. Inspections of premises where sickness prevailed were made, but no cause for outbreak of disease could be found.

7. Sanitary inspections of several sink-drains and cess-pools were made, and same were ordered cleaned.

8. No unhealthy localities in this town are known.

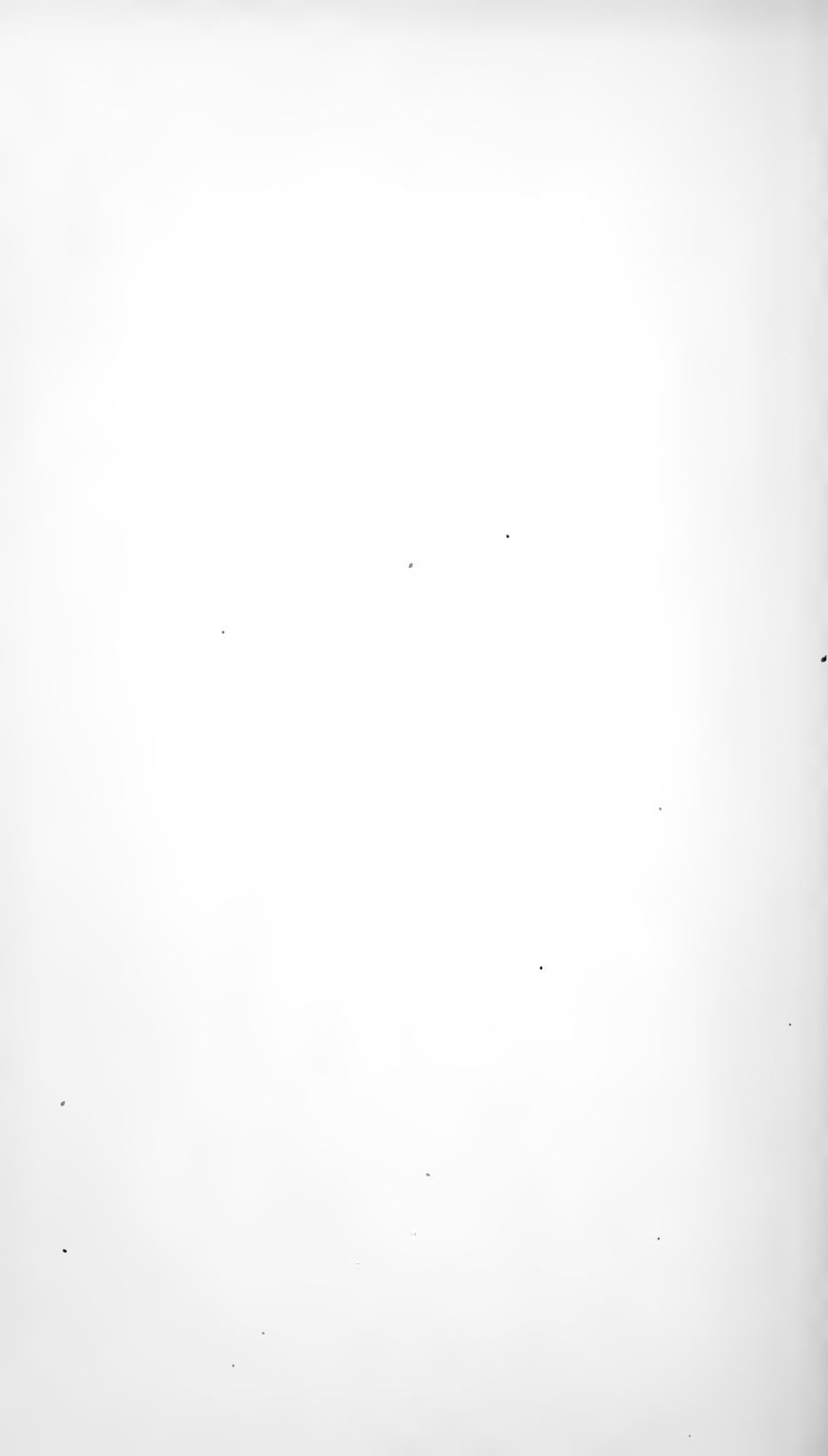
9. All public nuisances, unsanitary premises, etc., are reported to the town council.

10. There has been, to my knowledge, no contamination of the water, milk, or ice supplies of this town.

11. George F. Friday and George A. Griffin, of Wakefield, and Asa Sweet, of Kingston, are the ice dealers of this town.

1. WESTERLY. No report from the health officer.

WATER SUPPLIES.



EXAMINATION OF WATER SUPPLIES.

Since 1894 the Board has made monthly analyses of the water supply of the city of Providence, taken from the Pawtuxet river.

The samples have been taken at three different points: At the Pettaconset pumping station; at Washington village, on the south branch, at a point above any known source of contamination; and at the village of Hope, on the north branch of the river, above any possible source of contamination from villages, residences, or manufacturers.

These reports have been of considerable service in determining the quality of the supply at various points, and permitting of comparison as to their value and the possibility of pollution at any point between the sources of supply and the intake.

At a time when the question as to the necessity of filtering the supply before serving it to the city arose, a proposal that it might be more desirable to take the supply direct from the reservoirs to be constructed on one of the branches of the river above possible sources of pollution was presented. By reference to the published results of these examinations, it was determined that a vast amount of contamination entered the water between the two upper branches and the intake or pumping station. This arises largely from the surface drainage from fields and villages along the stream, and from the large amount of sediment which has accumulated in the bed of the river.

While the stream is running evenly the sediment is caught in the various reservoirs at the dams connected with the various industries along the banks of the stream. As soon as a mill starts up a rush of water follows, stirring up and carrying along the sediment which

was lying in the shallow stream. This mixture is received at the pumping station, giving a polluted water.

Owing to the distance of the heads of the river, however, and to the probable excessive cost of acquiring control of the water-shed, the proposition of obtaining a supply from the upper branches was left in abeyance.

An examination of this water supply has been made by the engineer's department of the city of Providence for many years, one sample being taken on the first and fifteenth of every month. All of the above examinations since 1894 will be found in detail by months in the previous reports of the Board. The average of the several years will be found in this report in conjunction with the monthly reports.

While the supply of the city of Providence is the largest and most important of any in the State, inasmuch as it supplies the largest population, it was believed by the Board that it was equally important that all potable public water supplies in the State should be examined periodically, first to determine their fitness for a drinking-water, and, second, to be posted as to any change which might take place in the character of the water at any time and especially in the presence of an epidemic of any water-borne disease, as the Board would be in a position to determine if any deterioration in the character of the water had occurred at the time and if it might have any influence in the production of the epidemic.

Accordingly, since 1900, chemical and bacteriological examinations of all the public water supplies have been made monthly.

These were found to vary in quality from what might be considered as perfect, to a condition which indicated that the continued use of the water would be dangerous to the health of the consumers.

The information thus obtained indicated the necessity of one supply receiving immediate attention, and purification of this supply was secured by means of mechanical filtration. The studies of this process have been available for the installation of filter plants using this form of filtration. It has been successful and manageable, while

the expense of running has been somewhat less than had been anticipated.

In only four instances are the supplies owned by the cities where the water is used; namely, the city of Providence, the city of Pawtucket, the city of Woonsocket, and the town of Westerly. In the Pawtuxet Valley there are four public water supplies. These are operated by private water companies. The water-sheds of all four are practically free from possible contamination or pollution, being free from habitations and industrial plants. They are called the East Greenwich Water Company, the Pawtuxet Valley Water Company, the Coventry Water Company, and one known as Knight's Spring.

The results of the analyses of this group will be found in the following tables, and indicate that they are practically of very good quality for surface supplies.

The supply at Block Island is taken from a pond which receives a certain amount of surface flow. The water-shed is free from habitation. The pond is supposed to be fed also from springs. The quality is fairly good, though, like most of the waters in the State which are held in storage for a period of time, liable to be infected with algæ growths of different forms which at times produce a disagreeable odor and taste to the drinking-water.

The supply of Woonsocket is received from a large water-shed which is owned or controlled by the city. The shed is closely watched and inspected. Practically no habitations are located on the area.

The supply, while a sanitary water as far as chemical and bacteriological analyses shows, is good, but the source, being a surface supply and the storage being in contact with organic and earthy matter, the water has quite a high color and a slightly vegetable or woody taste. This can be corrected only by filtration.

The city of Newport derives its supply from two or three streams which run through a rather level water-shed, the area of which is fairly well inhabited, and in some instances the streams have been utilized as a drainage disposal system for individual residences.

The color of the water is not very high and the taste not of a potable standard. The organic matter is variable with the season.

The town of Jamestown is supplied from two different sources, one called the South Station, and the other located further up the Island of Conanicut and called the North Station. The former supplies a white water, while the latter is darker and does not show as pure a quality when examined chemically and bacteriologically.

The supply at Wakefield and Narragansett Pier is derived from a flat water-shed, not thickly inhabited, but is impounded in reservoirs where much coloring matter is taken up from the decay of vegetable matter such as stumps, trees, and leaves. The only means of securing a white potable water with this supply would be by the use of filtration. Owing to the small consumption, such expense at the present time might not be warranted.

The Bristol Water Works, supplying the towns of Bristol and Warren, derives its supply from surface flow and impounding in two reservoirs. The upper one, being flooded over stumps and decaying vegetable matter, delivers considerable decomposed organic matter to the lower reservoir.

The accumulation of this material for many years in the lower reservoir has produced a condition whereby the water held in storage in the upper reservoir may become increased in color and in all organic constituents after passing through the lower reservoir and before being pumped into the mains.

The location of the lower reservoir was an area which was previously flooded by the tidal salt water from Mount Hope bay. The dam for holding back the fresh water is so near to the high-water line that at high tides the salt water may exchange its saline quarters from the outside into the storage reservoir above the dam.

With an extremely high tide and a south wind the salt water from without may at times overcome the baffle-boards or flap-gates of the dam and the water in the lower reservoir becomes saturated with chlorine, and the resulting analyses must necessarily at times be freaky with the variations in the tide and weather conditions.

The color is extremely high. The taste is musty and not entic-

ing to the average person who drinks water for his natural food or condiment.

Spasmodic attempts have been made from time to time to rectify these conditions, but owing to a difference of opinion between the private owners of the supply and the town as to the value of the whole plant, and water company business, naturally no attempt would be made to rectify the character of the water. It is to be hoped that, after the legal masters to whom the business status has been referred make their report, a satisfactory agreement may be arrived at.

The periodical examination of these water supplies gives valuable working data to the Board in the presence of the prevalence of any water-borne or communicable disease.

While typhoid fever and cholera are the only two diseases which are considered as water-borne at the present time, the periodical examination of these supplies gives data to the Board which can be acted upon promptly to the advantage of any town or city which has been afflicted.

If the causation of an epidemic is directly traced to a water supply, the records of the results of the chemical and bacteriological tests allow of certain deductions of exclusion or possible inclusion as a causative factor, thus permitting of immediate determination and also more earnest effort in other directions to determine a possible source of infection.

The following tables present the results of the periodical analyses of the different supplies.

The results are given by months, also by yearly averages and in groups where the supplies come from the same neighborhood or where there are samples taken at different points in the course of the flow of the supply.

The figures in the following tables given as the averages for the residue on evaporation, hardness, and alkalinity determinations are to the nearest .05 part per 100,000, that being the accuracy of the methods used for these determinations.

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the Pawtuxet River, at Pumping Station at Pettaconset, collected during the second and fourth week of the month.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 9.....	sl.	sl.	.43	4.55	2.00	2.55	.0032	.0168	.0154	.0014	.36	.016	0	.73	1.11	.35	762
Jan. 23.....	"	dist.	.36	4.40	1.75	2.65	.0042	.0180	.0146	.0034	.37	.012	trace.	.68	.71	.38	25544
Monthly avg...	"	dist.	.40	4.48	1.88	2.60	.0037	.0174	.0150	.0024	.37	.014	"	.71	.91	.37	13153
Feb. 6.....	dist.	sl.	.32	4.95	1.80	3.15	.0022	.0188	.0176	.0012	.39	.016	0	.67	1.11	.50	1426
Feb. 21.....	"	dist.	.25	5.05	1.30	3.75	.0028	.0158	.0130	.0028	.40	.016	.0010	.51	1.11	.45	1529
Monthly avg...	"	"	.29	5.00	1.55	3.45	.0025	.0173	.0153	.0020	.40	.016	.0005	.59	1.11	.48	1478
Mar. 6.....	sl.	sl.	.27	3.10	1.20	1.90	.0022	.0146	.0138	.0008	.19	.013	0	.55	.71	.37	3348
Mar. 20.....	v. sl.	"	.30	3.90	1.50	2.40	.0008	.0146	.0142	.0004	.27	.010	0	.50	.63	.35	407
Monthly avg...	sl.	"	.29	3.50	1.35	2.15	.0015	.0146	.0140	.0006	.23	.012	0	.53	.67	.36	1878
April 10.....	sl.	sl.	.41	3.85	1.65	2.20	.0018	.0164	.0152	.0012	.24	.010	trace.	.63	.63	.51	987
April 24.....	"	"	.40	3.95	1.35	2.60	.0004	.0192	.0174	.0018	.35	.015	.0002	.62	.95	.59	1338
Monthly avg...	"	"	.41	3.90	1.50	2.40	.0011	.0178	.0163	.0015	.30	.013	.0001	.63	.79	.55	1163

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the Pawtuxet River, at Pumping Station at Pattaconsset, collected during the second and fourth week of the month.—Continued.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
May 8.....	dec.	sl.	.41	4.75	1.45	3.30	.0012	.0232	.0202	.0030	.38	.015	.0012	.65	1.27	.59	10354
May 22.....	dist.	"	.41	4.95	1.95	3.00	.0012	.0234	.0190	.0044	.41	.014	trace.	.56	1.27	.61	20832
Monthly avg...	dec.	"	.41	4.85	1.70	3.15	.0012	.0233	.0196	.0037	.40	.015	.0006	.61	1.27	.60	15593
June 5.....	sl.	sl.	.45	4.20	1.30	2.90	.0022	.0254	.0202	.0052	.41	.010	0	.58	1.35	.81	.....
June 19.....	"	"	.46	4.65	1.60	3.05	.0030	.0240	.0206	.0034	.42	.012	.0002	.49	1.63	1.00	11594
Monthly avg...	"	"	.46	4.43	1.45	2.98	.0026	.0247	.0204	.0043	.42	.011	.0001	.54	1.49	.91	.....
July 10.....	sl.	sl.	.41	4.40	1.80	2.60	.0012	.0194	.0162	.0032	.35	.011	trace.	.40	.95	.80	3410
July 24.....	"	"	.40	4.45	1.55	2.90	.0036	.0238	.0218	.0020	.30	.013	0	.52	.95	.78	7750
Monthly avg...	"	"	.41	4.43	1.68	2.75	.0024	.0216	.0190	.0026	.33	.012	trace.	.46	.95	.79	5580
Aug. 7.....	sl.	sl.	.42	5.30	1.90	3.40	.0018	.0284	.0240	.0044	.32	.007	trace.	.57	1.27	.71	1st
Aug. 28.....	v. sl.	"	.35	5.80	1.75	4.05	.0024	.0214	.0196	.0018	.40	.010	0	.51	1.43	.90	108
Monthly avg...	sl.	"	.39	5.55	1.83	3.72	.0021	.0219	.0218	.0031	.36	.009	trace.	.54	1.35	.81	.....

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the Pawtuxet River, at Pumping Station at Pettaconset, collected during the second and fourth week of the month.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Sept. 11.....	v. sl.	dist.	.37	5.20	1.30	3.90	.0038	.0292	.0232	.0060	.42	.007	.0002	.49	1.02	....	1787
Sept. 25.....	sl.	sl.	.35	5.60	1.45	4.15	.0036	.0264	.0188	.0076	.47	.007	.0002	.46	1.50	....	23002
Monthly avg...	"	dist.	.36	5.40	1.38	4.02	.0037	.0278	.0210	.0068	.45	.007	.0002	.48	1.26	....	12395
Oct. 9.....	sl.	dist.	.49	5.80	2.05	3.75	.0022	.0276	.0212	.0064	.44	.005	.0002	.68	1.35	.80	10268
Oct. 23.....	dist.	dec.	.52	7.20	2.55	4.65	.0010	.0304	.0226	.0078	.54	.008	trace.	.76	1.63	.71	3019
Monthly avg...	"	"	.51	6.50	2.30	4.20	.0016	.0290	.0219	.0071	.49	.007	.0001	.72	1.49	.76	6644
Nov. 6.....	sl.	dec.	.60	6.70	2.50	4.20	.0012	.0280	.0238	.0042	.52	.013	.0006	.88	1.43	.71	3720
Nov. 20.....	dist.	"	.56	6.50	2.35	4.15	.0020	.0328	.0242	.0086	.52	.011	.0002	.85	1.63	.83	7204
Monthly avg...	"	"	.58	6.60	2.43	4.17	.0016	.0304	.0240	.0064	.52	.012	.0004	.87	1.53	.77	5462
Dec. 4.....	dist.	dec.	.62	6.85	2.20	4.65	.0020	.0286	.0260	.0026	.49	.020	.0004	.84	1.43	.81	2790
Dec. 18.....	sl.	"	.52	4.80	1.80	3.00	.0022	.0258	.0176	.0082	.29	.013	trace.	.83	.74	.50	5084
Monthly avg...	dist.	"	.57	5.83	2.00	3.83	.0021	.0272	.0218	.0034	.39	.017	.0002	.84	1.09	.66	3937
Yearly avg....	sl.	sl.	.42	5.05	1.75	3.30	.0022	.0230	.0192	.0038	.39	.012	.0002	.62	1.15	.65	6650

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the South Branch of the Pawtuxet River at Washington, above all sources of pollution, collected during the second and fourth week of the month.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 9.....	v. sl.	sl.	pink .77	4.05	1.95	2.10	.0032	.0198	.0178	.0020	.37	.006	.0052	.90	.56	.28	569
Jan. 23.....	"	v. sl.	.40	3.50	1.40	2.10	.0020	.0120	.0116	.0004	.27	.007	0	.55	.55	.35	765
Monthly avg...	"	sl.	.59	3.78	1.68	2.10	.0026	.0159	.0147	.0012	.32	.007	.0026	.73	.56	.32	667
Feb 6.....	v. sl.	v. sl.	.35	3.30	1.40	1.90	.0010	.0112	.0112	.0000	.32	.005	0	.54	.40	.37	220
Feb. 20.....	"	"	.29	3.50	1.15	2.35	.0008	.0104	.0094	.0010	.30	.006	0	.43	.48	.35	87
Monthly avg...	"	"	.32	3.40	1.28	2.12	.0009	.0108	.0103	.0005	.31	.006	0	.49	.44	.36	154
Mar. 6.....	v. sl.	v. sl.	.23	2.75	.65	2.10	.0006	.0142	.0114	.0028	.19	.007	0	.40	.40	.22	5084
Mar. 20.....	"	"	.30	2.90	1.30	1.60	.0004	.0124	.0124	.0000	.21	.006	0	.44	.24	.24	75
Monthly avg...	"	"	.27	2.83	.98	1.85	.0005	.0133	.0119	.0014	.20	.007	0	.42	.32	.23	2580
April 10.....	v. sl.	v. sl.	.45	2.90	1.15	1.75	.0006	.0140	.0136	.0004	.24	.005	0	.58	.32	.36	153
April 24.....	"	"	.36	2.90	1.50	1.40	.0008	.0160	.0152	.0008	.25	.008	0	.52	.48	.32	127
Monthly avg...	"	"	.41	2.90	1.33	1.57	.0007	.0150	.0144	.0006	.25	.007	0	.55	.40	.34	140

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the South Branch of the Pawtuxet River at Washington, above all sources of pollution, collected during the second and fourth week of the month.—Continued.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			As Nitrates.	As Nitrites.					
								Total.	In Solution.								In Suspension.
May 8.....	v. sl.	v. sl.	.43	2.50	1.25	1.25	.0010	.0174	.0170	.0004	.30	.005	0	.65	.56	.39	180
May 22.....	"	sl.	.40	3.20	1.25	1.95	.0020	.0160	.0140	.0020	.36	.003	0	.51	.79	.60	190
Monthly avg...	"	"	.42	2.85	1.25	1.60	.0015	.0167	.0155	.0012	.33	.004	0	.58	.68	.50	185
June 5.....	v. sl.	v. sl.	.50	3.40	1.60	1.80	.0024	.0196	.0194	.0002	.29	.002	0	.61	.63	.41	578
June 19.....	"	"	.42	3.10	1.30	1.80	.0016	.0186	.0182	.0004	.31	.006	0	.52	.40	.48	401
Monthly avg...	"	"	.46	3.25	1.45	1.80	.0020	.0191	.0188	.0003	.30	.004	0	.57	.52	.45	490
July 10.....	v. sl.	v. sl.	.45	3.65	1.45	2.20	.0012	.0192	.0188	.0004	.26	.002	0	.47	.48	.45	4526
June 24.....	"	sl.	.40	3.25	1.20	2.05	.0016	.0198	.0188	.0010	.24	.004	0	.49	.55	.30	148
Monthly avg...	"	"	.43	3.45	1.33	2.12	.0014	.0195	.0188	.0007	.25	.003	0	.48	.52	.38	2337
Aug. 7.....	v. sl.	v. sl.	.42	3.90	1.60	2.30	.0016	.0206	.0194	.0012	.22	.003	0	.52	.48	.45	Lt. st.
Aug. 28.....	"	"	.36	3.80	1.00	2.80	.0012	.0176	.0168	.0008	.25	.004	0	.48	.40	.32	69
Monthly avg...	"	"	.39	3.85	1.30	2.55	.0014	.0191	.0181	.0010	.24	.004	0	.50	.44	.39	.....

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the South Branch of the Pawtuxet River at Washington, above all sources of pollution, collected during the second and fourth week of the month — Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Total.	In Solution.	In Suspension.	Chlorine.	As Nitrates.	As Nitrites.				
Sept. 11.	v. sl.	v. sl.	.35	3.35	1.05	2.30	.0008	.0202	.0198	.0004	.23	.004	0	.39	.63	.55	131
Sept. 25.	"	"	.35	3.60	1.45	2.15	.0022	.0178	.0166	.0012	.28	.006	0	.40	.48	.40	228
Monthly avg.	"	"	.35	3.48	1.25	2.23	.0015	.0190	.0182	.0008	.26	.005	0	.40	.56	.48	180
Oct. 9.	v. sl.	v. sl.	.47	3.90	2.05	1.85	.0038	.0204	.0198	.0006	.28	.003	0	.59	.63	.49	61
Oct. 23.	"	"	.54	4.80	2.00	2.80	.0060	.0220	.0212	.0008	.35	.005	0	.69	.63	.49	76
Monthly avg.	"	"	.51	4.35	2.03	2.32	.0049	.0212	.0205	.0007	.32	.004	0	.64	.63	.49	69
Nov. 6.	v. sl.	v. sl.	.55	3.95	1.20	2.75	.0020	.0180	.0174	.0006	.36	.005	0	.69	.63	.52	90
Nov. 20.	sl.	"	.60	4.60	2.05	2.55	.0034	.0190	.0182	.0008	.36	.004	0	.72	.63	.41	158
Monthly avg.	"	"	.58	4.28	1.63	2.65	.0027	.0185	.0178	.0007	.36	.005	0	.71	.63	.47	124
Dec. 4.	v. sl.	v. sl.	.46	4.25	1.45	2.80	.0042	.0186	.0182	.0004	.31	.010	0	.50	.48	.40	163
Dec. 18.	"	"	.44	3.90	1.45	2.45	.0040	.0140	.0138	.0002	.28	.008	0	.56	.55	.55	469
Monthly avg.	"	"	.45	4.08	1.45	2.63	.0041	.0163	.0160	.0003	.30	.009	0	.53	.52	.48	316
Yearly avg.	v. sl.	v. sl.	.43	3.55	1.40	2.15	.0020	.0170	.0162	.0008	.28	.005	.0002*	.55	.50	.40	633

* All determinations 0 except one.

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the North Branch of the Pawtuxet River at Hope, above all sources of pollution, collected during the second and fourth week of the month.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE OR EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 9.....	trace	v. sl.	.30	3.35	1.25	2.10	.0014	.0152	.....	.....	.25	.010	0	.45	.48	.45	222
Jan. 23.....	v. sl.	"	.35	2.65	.85	1.80	.0020	.0130	.0124	.0006	.29	.010	0	.59	.48	.23	5828
Monthly avg...	"	"	.33	3.00	1.05	1.95	.0017	.0141	.....	.....	.27	.010	0	.52	.44	.34	3025
Feb. 6.....	v. sl.	trace	.26	2.90	1.35	1.55	.0006	.0086	.0086	.0000	.25	.005	0	.44	.48	.35	435
Feb. 20.....	"	v. sl.	.25	3.55	1.30	2.25	.0008	.0100	.0096	.0004	.28	.010	0	.39	.48	.35	103
Monthly avg...	"	"	.26	3.23	1.33	1.90	.0007	.0093	.0094	.0002	.27	.008	0	.42	.48	.35	269
Mar. 6.....	v. sl.	sl.	.30	2.70	1.15	1.55	.0014	.0154	.0136	.0018	.14	.005	0	.50	.32	.21	4774
Mar. 20.....	"	v. sl.	.29	2.50	1.05	1.45	.0006	.0114	.0108	.0006	.23	.005	0	.43	.32	.22	338
Monthly avg...	"	sl.	.30	2.60	1.10	1.50	.0010	.0134	.0122	.0012	.19	.005	0	.47	.32	.22	2556
April 10.....	v. sl.	v. sl.	.40	2.80	1.00	1.80	.0008	.0132	.0130	.0002	.22	.005	0	.60	.32	.39	511
April 24.....	"	"	.28	3.20	1.50	1.70	.0008	.0134	.0124	.0010	.23	.007	0	.43	.48	.41	274
Monthly avg...	"	"	.34	3.00	1.25	1.75	.0008	.0133	.0127	.0006	.23	.006	0	.52	.40	.40	423

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the North Branch of the Pawtuxet River at Hope, above all sources of pollution, collected during the second and fourth week of the month.—Continued.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITROGEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
May 8.....	v. sl.	v. sl.	.35	3.35	1.40	1.95	.0016	.0158	.0140	.0018	.26	.007	0	.53	.63	.39	258
May 22.....	"	"	.46	4.10	1.20	2.90	.0008	.0168	.0160	.0008	.30	.003	0	.59	.48	.42	523
Monthly avg...	"	"	.41	3.73	1.30	2.43	.0012	.0163	.0150	.0013	.28	.005	0	.56	.56	.41	391
June 5.....	v. sl.	v. sl.	.45	3.35	1.35	2.00	.0014	.0206	.0196	.0010	.26	.002	0	.58	.79	.51	1634
June 19.....	"	"	.40	3.25	1.10	2.15	.0010	.0188	.0182	.0006	.28	.008	0	.49	.63	.59	614
Monthly avg...	"	"	.43	3.30	1.23	2.07	.0012	.0197	.0189	.0008	.27	.005	0	.54	.71	.55	1124
July 10.....	sl.	sl.	.41	3.45	1.50	1.95	.0008	.0170	.0158	.0012	.22	.004	0	.44	.48	.45	6200
July 24.....	v. sl.	"	.47	3.80	1.35	2.45	.0018	.0228	.0196	.0032	.21	.015	0	.60	.63	.41	642
Monthly avg...	sl.	"	.44	3.63	1.43	2.20	.0013	.0199	.0177	.0022	.22	.010	0	.52	.56	.43	3421
Aug. 7.....	v. sl.	v. sl.	.54	4.25	2.15	2.10	.0010	.0198	.0196	.0002	.19	.005	0	.68	.55	.50	Lost.
Aug. 28.....	"	"	.33	3.75	1.05	2.70	.0010	.0158	.0148	.0010	.19	.005	0	.49	.56	.51	52
Monthly avg...	"	"	.44	4.00	1.60	2.40	.0010	.0178	.0172	.0006	.19	.005	0	.59	.56	.51	

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the North Branch of the Pawtuxet River at Hope, above all sources of pollution, collected during the second and fourth week of the month.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Sept. 11.....	v. sl.	v. sl.	.36	3.35	1.25	2.10	.0008	.0184	.0174	.0010	.20	.004	0	.44	.63	.50	146
Sept. 25.....	"	"	.34	3.30	1.40	1.90	.0006	.0168	.0166	.0002	.17	.005	0	.44	.56	.40	202
Monthly avg...	"	"	.35	3.33	1.33	2.00	.0007	.0176	.0170	.0006	.19	.005	0	.44	.60	.45	174
Oct. 9.....	v. sl.	v. sl.	.55	4.45	1.70	2.75	.0010	.0212	.0208	.0004	.32	.001	0	.72	.79	.48	138
Oct. 23.....	"	"	.51	4.70	2.10	2.60	.0010	.0204	.0198	.0006	.32	.005	0	.69	.79	.50	115
Monthly avg...	"	"	.53	4.58	1.90	2.68	.0010	.0208	.0203	.0005	.32	.003	0	.71	.79	.49	127
Nov. 6.....	v. sl.	v. sl.	.65	4.05	1.65	2.40	.0012	.0178	.0170	.0008	.38	.008	0	.88	.79	.55	836
Nov. 20.....	sl.	"	.54	4.10	1.65	2.45	.0020	.0172	.0156	.0016	.33	.006	0	.67	.79	.40	268
Monthly avg...	"	"	.60	4.08	1.65	2.43	.0016	.0175	.0163	.0012	.36	.007	0	.78	.79	.48	552
Dec. 4.....	v. sl.	v. sl.	.50	4.75	1.70	3.05	.0022	.0164	.0158	.0006	.30	.010	0	.63	.71	.40	454
Dec. 18.....	"	"	.60	3.85	1.55	2.30	.0008	.0202	.0168	.0034	.22	.003	0	.81	.48	.39	3844
Monthly avg...	"	"	.55	4.30	1.63	2.67	.0015	.0183	.0163	.0020	.26	.007	0	.72	.60	.40	2149
Yearly avg....	v. sl.	v. sl.	.41	3.55	1.40	2.15	.0011	.0165	.0155	.0010	.25	.006	0	.56	.55	.40	1235

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the tap in the Laboratory of the State Board of Health in Providence, collected during the second and fourth week of the month.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			APPEARANCE.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 9.	v. sl.	v. sl.	.48	4.20	1.50	2.70	.0018	.0156	.0150	.0006	.37	.018	0	.67	.95	.48	192
Jan. 23.	"	"	.35	4.15	1.30	2.85	.0016	.0144	.0130	.0014	.40	.014	.0002	.53	1.03	.55	724
Monthly avg. . .	"	"	.42	4.18	1.40	2.78	.0017	.0150	.0140	.0010	.39	.016	.0001	.60	.99	.52	458
Feb. 6.	v. sl.	v. sl.	.31	4.20	1.70	2.50	.0024	.0152	.0138	.0014	.39	.016	0	.51	1.11	.45	341
Feb. 20.	"	sl.	.25	4.85	1.70	3.15	.0014	.0178	.0120	.0058	.39	.016	.0004	.46	.95	.65	660
Monthly avg. . .	"	"	.28	4.53	1.70	2.83	.0019	.0165	.0129	.0036	.39	.016	.0002	.49	1.03	.55	501
Mar. 6.	v. sl.	sl.	.25	3.60	1.35	2.25	.0052	.0134	.0128	.0006	.28	.009	0	.41	.63	.37	1984
Mar. 20.	"	"	.26	3.00	1.40	1.60	.0034	.0118	.0112	.0006	.30	.006	0	.45	.56	.40	307
Monthly avg. . .	"	"	.26	3.30	1.38	1.92	.0043	.0126	.0120	.0006	.29	.008	0	.43	.60	.39	1146
April 10.	v. sl.	sl.	.35	3.45	1.25	2.20	.0010	.0146	.0140	.0006	.35	.009	trace.	.50	.95	.52	210
April 24.	"	"	.31	3.85	1.45	2.40	.0012	.0184	.0130	.0054	.36	.011	0	.48	.95	.52	400
Monthly avg. . .	"	"	.33	3.65	1.35	2.30	.0011	.0165	.0135	.0030	.36	.010	trace.	.49	.95	.52	305

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the tap in the Laboratory of the State Board of Health in Providence, collected during the second and fourth week of the month.—Continued.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
May 8.....	dec.	dec.	.35	4.65	1.85	2.80	.0018	.0192	.0138	.0054	.38	.015	.0002	.53	1.27	.59	192
May 22.....	v. sl.	sl.	.35	4.55	1.65	2.90	.0002	.0170	.0142	.0028	.41	.020	0	.50	1.27	.65	425
Monthly avg...	dec.	dec.	.35	4.60	1.75	2.85	.0010	.0181	.0140	.0041	.40	.018	.0001	.52	1.27	.62	309
June 5.....	sl.	sl.	.42	4.60	1.45	3.15	.0012	.0180	.0158	.0022	.41	.016	0	.48	1.11	.70	334
June 19.....	"	"	.41	4.25	1.10	3.15	.0006	.0182	.0156	.0026	.42	.014	0	.43	1.43	.82	602
Monthly avg...	"	"	.42	4.43	1.28	3.15	.0009	.0181	.0157	.0024	.42	.015	0	.46	1.27	.76	468
July 10.....	v. sl.	v. sl.	.41	4.65	1.45	3.20	.0002	.0174	.0158	.0016	.34	.014	0	.34	.95	.75	Lost.
July 24.....	"	"	.35	4.30	1.35	2.95	.0002	.0186	.0174	.0012	.31	.018	0	.41	1.11	.65	184
Monthly avg...	"	"	.38	4.48	1.40	3.08	.0002	.0180	.0166	.0014	.33	.016	0	.38	1.03	.70	.....
Aug. 7.....	sl.	sl.	.45	5.20	2.90	3.20	.0002	.0236	.0214	.0022	.32	.010	trace.	.49	.95	.70	Lost.
Aug. 28.....	v. sl.	v. sl.	.35	5.70	1.10	4.60	.0008	.0164	.0148	.0016	.40	.015	0	.45	1.43	.90	32
Monthly avg...	sl.	sl.	.40	5.45	1.55	3.90	.0005	.0200	.0181	.0019	.36	.013	trace.	.47	1.19	.80	.....

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the tap in the Laboratory of the State Board of Health in Providence, collected during the second and fourth week of the month—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Sept. 11.....	v. sl.	sl.	33	5.65	1.30	1.35	.0010	.0192	.0164	.0028	.42	.011	0	.43	1.35	.90	337
Sept. 25.....	"	"	31	5.60	1.39	4.30	.0006	.0180	.0161	.0016	.52	.009	trace.	.42	1.43	.72	807
Monthly avg....	"	"	32	5.63	1.30	4.33	.0008	.0185	.0161	.0022	.47	.012	trace.	.43	1.39	.81	572
Oct. 9.....	sl.	sl.	42	5.30	1.65	3.65	.0008	.0208	.0172	.0036	.45	.009	0	.48	1.43	.80	1051
Oct. 23.....	"	"	48	5.65	1.60	1.05	.0008	.0194	.0166	.0028	.52	.011	0	.60	1.56	.72	2108
Monthly avg....	"	"	45	5.48	1.63	3.85	.0008	.0201	.0169	.0032	.49	.010	0	.54	1.50	.76	1580
Nov. 6.....	v. sl.	sl.	59	6.20	2.35	3.85	.0010	.0222	.0176	.0046	.53	.012	trace.	.73	1.50	.70	391
Nov. 20.....	sl.	"	52	5.90	1.60	4.30	.0008	.0208	.0184	.0024	.53	.010	0	.66	1.50	.80	476
Monthly avg....	"	"	56	6.05	1.98	4.07	.0009	.0215	.0180	.0035	.53	.011	trace.	.70	1.50	.75	434
Dec. 4.....	v. sl.	sl.	50	5.55	1.65	3.90	.0014	.0206	.0174	.0032	.49	.017	trace.	.61	1.27	.90	746
Dec. 18.....	"	"	45	5.35	1.80	3.55	.0006	.0190	.0150	.0040	.45	.015	trace.	.60	1.27	.69	1003
Monthly avg....	"	"	48	5.45	1.73	3.72	.0010	.0198	.0162	.0036	.47	.016	trace.	.61	1.27	.80	875
Yearly avg....	v. sl.	sl.	39	4.80	1.55	3.25	.0013	.0179	.0154	.0025	41	.013	0	.51	1.15	.65	615

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, giving the Average for the Years 1900-1902, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPO- RATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
		Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.				As Nitrates.	As Nitrites.					
						Total.	In Solution.	In Suspension.								
Pettaconsett—																
1900 .....	.45	5.80	1.90	3.90	.0014	.0222	.0182	.0040	.46	.014	.0003	.56	1.45	1.00		3395
1901.....	.44	5.85	2.10	3.75	.0013	.0248	.0207	.0041	.42	.013	.0003	.67	1.40	.80		4032
1902.....	.42	5.05	1.75	3.30	.0022	.0230	.0192	.0038	.39	.012	.0002	.62	1.15	.65		6650
Washington—																
1900.....	.46	3.75	1.50	2.25	.0017	.0173	.0164	.0009	.28	.006	.0000	.55	.60	.60		1072
1901.....	.45	3.85	1.60	2.25	.0015	.0173	.0163	.0010	.28	.004	.0000	.59	.65	.50		792
1902.....	.43	3.55	1.40	2.15	.0020	.0170	.0162	.0008	.28	.005	.0002*	.55	.50	.40		633
Hope—																
1900.....	.39	3.60	1.40	2.20	.0007	.0155	.0142	.0013	.25	.007	.0000	.48	.70	.60		536
1901.....	.40	3.95	1.50	2.45	.0005	.0154	.0145	.0009	.26	.005	.0000	.53	.70	.50		694
1902.....	.41	3.55	1.40	2.15	.0011	.0165	.0155	.0010	.25	.006	.0000	.56	.55	.40		1235
Laboratory Tap—																
1900.....																
1901.....	.41	6.20	1.95	4.25	.0005	.0224	.0193	.0031	.49	.013	.0001	.57	1.70	.95		1600
1902.....	.39	4.80	1.55	3.25	.0013	.0179	.0154	.0025	.41	.013	.0000	.51	1.15	.65		615

* All determinations 0 except one.

Pawtuxet Valley Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Pawtuxet Valley, controlled by the Pawtuxet Valley Water Company, the sample being taken in the village of Riverpoint.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITROGEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 13.....	v. sl.	0	.35	3.50	1.75	1.75	.0036	.0136	.0136	.0000	.28	.022	.0000	.49	.79	.44	238
Feb. 10.....	sl.	v. sl.	.26	3.40	.80	2.60	.0062	.0134	.0120	.0014	.36	.017	.0000	.39	.63	.40	117
Mar. 20.....	v. sl.	v. sl.	.21	3.20	1.40	1.80	.0024	.0120	.0118	.0002	.29	.025	.0000	.35	.48	.24	29
April 14.....	0	v. sl.	.21	3.00	1.20	1.80	.0010	.0128	.0128	.0000	.29	.024	.0000	.32	.56	.39	838
May 19.....	0	v. sl.	.23	3.05	1.10	1.95	.0008	.0146	.0134	.0012	.30	.006	.0000	.34	.79	.59	.....
June 18.....	v. sl.	v. sl.	.31	3.30	1.10	2.20	.0010	.0186	.0176	.0010	.32	.008	.0000	.35	.95	.70	.....
July 14.....	v. sl.	trace	.35	3.45	1.00	2.45	.0006	.0182	.0170	.0012	.29	.012	.0000	.41	.79	.50	192
Aug. 1.....	v. sl.	v. sl.	.31	3.45	1.40	2.05	.0012	.0188	.0176	.0012	.28	.006	.0000	.33	.71	.60	1153
Sept. 15.....	v. sl.	v. sl.	.24	3.35	1.20	2.15	.0008	.0184	.0182	.0002	.26	.006	.0000	.31	.70	.....	241
Oct. 13.....	v. sl.	v. sl.	.32	3.75	1.15	2.60	.0012	.0190	.0180	.0010	.36	.005	.0000	.38	.95	.80	4836
Nov. 17.....	v. sl.	v. sl.	.45	4.30	1.40	2.90	.0006	.0180	.0180	.0000	.44	.010	.0000	.38	1.03	.80	346
Dec. 23.....	v. sl.	v. sl.	.42	4.25	1.60	2.65	.0070	.0208	.0196	.0012	.46	.024	.0000	.38	.95	.80	.....
Yearly avg.	v. sl.	v. sl.	.31	3.50	1.25	2.25	.0022	.0165	.0158	.0007	.33	.014	.0000	.37	.80	.55	888

Pawtuxet Valley Water Supply.

Chemical and Bacteriological Examination of the Water Supply in the Pawtuxet Valley, taken from a supply known as Knight's Spring or Fountain, the sample being taken in the village of Riverpoint.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.											
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.					Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
								Total.	In Solution.													In Suspension.
Jan. 13.....	0	0	0	6.20	2.55	3.65	.0000	.0012			.84	.440	.0000	.02	2.03	.28	34					
Feb. 10.....	0	0	0	5.75	2.25	3.50	.0002	.0014			.66	.334	.0000	.00	1.76	.28	25					
Mar. 20.....	0	0	0	5.50	1.80	3.70	.0000	.0014			.84	.264	.0000	.00	1.82	.10	46					
April 14.....	0	0	0	5.25	2.00	3.25	.0000	.0034			.72	.255	.0000	.00	1.82	.21	38					
May 19.....	0	0	0	5.10	1.60	3.50	.0000	.0018			.64	.246	.0000	.00	2.08	.33	12					
June 18.....	0	0	0	5.20	1.80	3.40	.0000	.0008			.64	.185	.0000	.00	1.95	.30	.....				
July 14.....	0	0	0	6.15	2.05	4.10	.0000	.0010			.68	.273	.0000	.01	1.95	.29	75					
Aug. 1.....	0	0	0	7.10	3.85	3.25	.0002	.0008			.75	.343	.0000	.00	2.15	.39	93					
Sept. 15.....	0	0	0	5.75	1.35	4.40	.0000	.0012			.56	.264	.0000	.00	1.89	.20	81					
Oct. 13.....	0	0	0	6.45	1.80	4.65	.0000	.0016			.74	.317	.0000	.00	1.69	.39	3410					
Nov. 17.....	0	0	0	7.55	2.40	5.15	.0000	.0008			.94	.484	.0000	.00	2.73	.42	240					
Dec. 22.....	0	0	0	7.85	2.75	5.10	.0002	.0028			1.08	.440	.0000	.00	2.34	.40	1330					
Yearly avg.	0	0	0	6.15	2.20	3.95	.0001	.0015			.76	.320	.0000	.00	2.00	.30	571					

Pawtuxet Valley Water Supply.

Chemical and Bacteriological Examination of the Water Supply in the Pawtuxet Valley, controlled by the Coventry Water Company, the sample being taken in the village of Arctic Centre.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 13.....	0	0	.01	2.05	.70	1.35	.0008	.0068			.30	.002	.0000	.09	.24	.25	11
Feb. 10.....	0	0	.03	1.75	.70	1.05	.0008	.0074			.32	.003	.0000	.09	.20	.20	5580
Mar. 20.....	0	0	.01	2.10	.80	1.30	.0008	.0064			.29	.005	.0000	.07	.24	.17	Lost.
April 14.....	0	0	.00	1.70	.90	.80	.0004	.0068			.29	.005	.0000	.09	.32	.20	383
May 19.....	0	0	.00	1.80	.50	1.30	.0002	.0072			.30	.004	.0000	.06	.32	.19	10850
June 18.....	0	0	.00	2.10	.45	1.65	.0006	.0060			.29	.005	.0000	.07	.32	.30	
July 14.....	0	0	.04	2.20	.70	1.50	.0004	.0070			.29	.003	.0000	.10	.24	.15	5150
Aug. 1.....	0	0	.00	1.85	.65	1.20	.0002	.0074			.29	.003	.0000	.08	.16	.10	143
Sept. 15.....	0	0	.02	1.95	.40	1.55	.0004	.0078			.29	.005	.0000	.07	.32		1236
Oct. 13.....	0	0	.10	1.65	.30	1.35	.0002	.0056			.29	.002	.0000	.05	.32	.28	29
Nov. 17.....	0	0	.05	1.95	.70	1.25	.0002	.0052			.32	.004	.0000	.06	.24	.22	75
Dec. 22.....	0	0	.04	2.00	.75	1.25	.0014	.0080			.30	.003	.0000	.06	.24	.25	1017
Yearly avg ...	0	0	.03	1.95	.65	1.30	.0005	.0068			.30	.004	.0000	.07	.25	.20	2478

East Greenwich Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the town of East Greenwich,
the sample being taken from the tap in the Office of the Health Officer.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 13.....	v. sl.	v. sl.	.30	3.85	1.15	2.70	.0004	.0086	.0084	.0002	.39	.008	.0000	.39	.79	.45	740
Feb. 12.....	0	v. sl.	.29	4.25	.90	3.35	.0008	.0062	.0058	.0004	.33	.013	.0000	.27	....	.45	257
Mar. 17.....	v. sl.	0	.31	3.70	1.45	2.25	.0012	.0116	.0094	.0022	.36	.011	.0000	.48	.63	.40	112
April 14.....	0	v. sl.	.30	2.95	1.10	1.85	.0002	.0084	.0080	.0004	.37	.009	.0000	.58	.79	.41	1319
May 20.....	0	v. sl.	.30	4.15	1.25	2.90	.0002	.0090	.0088	.0002	.43	.015	.0000	.35	1.27	.90	287
June 16.....	0	v. sl.	.19	4.10	.95	3.15	.0006	.0078	.0066	.0012	.41	.008	.0000	.20	1.43	1.31	639
July 11.....	0	v. sl.	.56	5.30	1.30	4.00	.0004	.0114	.0106	.0008	.39	.011	.0000	.48	1.35	1.40	124
Aug. 1.....	v. sl.	sl.	.50	5.50	1.70	3.80	.0004	.0118	.0106	.0012	.39	.010	.0000	.45	1.69	1.60	3968
Sept. 15.....	0	v. sl.	.15	4.65	1.35	3.30	.0002	.0072	.0068	.0004	.39	.010	.0000	.20	1.56	1.40	65
Oct. 15.....	0	v. sl.	.23	4.90	1.00	3.90	.0002	.0078	.0070	.0008	.44	.010	.0000	.27	1.69	1.50	19
Nov. 18.....	v. sl.	v. sl.	.26	4.35	.95	3.40	.0002	.0074	.0064	.0010	.47	.010	.0000	.28	1.69	1.60	119
Dec. 18.....	0	v. sl.	.31	5.05	1.35	3.70	.0008	.0098	.0098	.0000	.46	.011	.0000	.33	1.69	1.10	137
Yearly avg.	0	v. sl.	.30	4.40	1.20	3.20	.0005	.0089	.0081	.0008	.41	.011	.0000	.36	1.35	1.05	649

Kent County Water Supply.

Chemical and Bacteriological Examination of the Water Supply of Kent County, giving the Average for the Years 1900-1902, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	RESIDUE ON EVAPO- RATION.				AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
						Total.	In Solution.	In Suspension.							
Pawtuxet Valley—															
1900.....	33	3.70	1.40	2.30	.0008	.0166	.0154	.0012	.32	.011	.0000	.36	.65	.89	527
1901.....	29	3.70	1.45	2.25	.0012	.0159	.0151	.0008	35	.016	.0000	.39	.80	.55	2341
1902.....	31	3.50	1.25	2.25	.0022	.0165	.0158	.0007	33	.015	.0000	.37	.80	.55	888
Knight's Spring—															
1900.....	.00	5.55	2.10	3.45	.0001	.0013			64	.237	.0000	.01	1.65	.30	1142
1901.....	.00	6.40	2.20	4.20	.0004	.0020			81	.321	.0000	.01	2.05	.30	373
1902.....	.00	6.15	2.20	3.95	.0001	.0015			76	.320	.0000	.00	2.00	.30	571
Coventry Water Co.—															
1900.....	.05	2.05	.60	1.45	.0003	.0063			28	.005	.0000	.08	.25	.30	2154
1901.....	.04	2.20	.70	1.50	.0002	.0074			29	.003	.0000	.08	.30	.25	1373
1902.....	.03	1.95	.65	1.30	.0005	.0068			30	.004	.0000	.07	.25	.20	2478
East Greenwich—															
1900.....															
1901.....	40	4.50	1.45	3.05	.0003	.0114	.0104	.0010	40	.009	.0000	.44	1.15	.85	2144
1902.....	30	4.40	1.20	3.20	.0005	.0089	.0081	.0008	41	.011	.0000	.36	1.35	1.05	649

Woonsocket Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the City of Woonsocket,
the sample being taken from the First Impounding Reservoir.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE OR EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 21.....	sl.	sl.	.65	4.10	1.85	2.25	.0166	.0332	.0294	.0038	.27	.003	.0000	.87	.55	.35	220
Feb. 19.....	sl.	sl.	.61	3.75	2.00	1.75	.0138	.0268	.0226	.0042	.24	.010	.0000	.77	.63	.45	35
Mar. 17.....	v. sl.	sl.	.40	2.90	1.30	1.60	.0150	.0162	.0140	.0022	.17	.005	.0000	.47	.56	.39	201
April 14.....	v. sl.	sl.	.38	2.85	1.50	1.35	.0008	.0240	.0180	.0060	.22	.008	.0000	.56	.63	.30	1262
May 20.....	sl.	sl.	.50	3.00	2.00	1.00	.0016	.0280	.0224	.0056	.24	.002	.0000	.64	.79	.35	209
June 23.....	dist.	sl.	.70	3.35	1.70	1.65	.0012	.0320	.0286	.0034	.20	.006	.0000	.73	.55	.40	227
July 21.....	dist.	sl.	.66	3.40	1.80	1.60	.0078	.0340	.0312	.0028	.22	.002	.0000	.62	.63	.50	2217
Aug. 25.....	dec.	dec.	.81	5.95	4.55	1.40	.0022	.0878	.0340	.0538	.20	.007	.0000	.99	.56	.50	2604
Sept. 15.....	dec.	dec.	.65	5.30	3.20	2.10	.0010	.0632	.0344	.0288	.20	.007	.0000	.90	.48	....	210
Oct. 21.....	dist.	sl.	.57	4.60	2.30	2.30	.0036	.0464	.0362	.0102	.27	.002	.0000	.81	.63	.40	2065
Nov. 24.....	sl.	sl.	.41	3.25	1.35	1.90	.0058	.0412	.0354	.0058	.26	.008	.0000	.68	.48	.30	91
Dec. 22.....	dist.	sl.	.41	3.00	1.45	1.55	.0036	.0276	.0264	.0012	.22	.005	.0000	.47	.40	.36	3472
Yearly avg.	sl. to dist.	sl.	.56	3.80	2.10	1.70	.0061	.0384	.0277	.0107	.23	.005	.0000	.71	.55	.40	1068

Woonsocket Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the City of Woonsocket,
the sample being taken from the Pumping Station.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 21.....	v. sl.	v. sl.	.41	3.50	.95	2.55	.0024	.0128	.0126	.0002	.29	.010	.0000	.55	.70	.50	99
Feb. 19.....	v. sl.	v. sl.	.39	4.00	1.40	2.60	.0044	.0141	.0140	.0004	.25	.015	.0000	.45	.70	.60	83
Mar. 17.....	v. sl.	v. sl.	.35	2.95	1.20	1.75	.0004	.0124	.0120	.0004	.21	.005	.0000	.38	.56	.35	108
April 14.....	v. sl.	v. sl.	.42	2.95	1.50	1.45	.0004	.0138	.0134	.0004	.22	.008	.0000	.53	.79	.40	495
May 20.....	sl.	v. sl.	.55	4.20	1.80	2.40	.0020	.0194	.0182	.0012	.26	.008	.0000	.61	.79	.60	605
June 23.....	v. sl.	sl.	.91	5.30	2.30	3.00	.0074	.0288	.0264	.0024	.20	.010	.0000	.91	.95	.65	1109
July 21.....	sl.	dist.	.72	4.25	1.65	2.60	.0054	.0274	.0212	.0062	.23	.011	.0000	.71	.79	.70	465
Aug. 25.....	sl.	dec.	.82	4.85	2.10	2.75	.0038	.0378	.0302	.0076	.20	.009	.0000	.85	.79	.50	363
Sept. 15.....	sl.	dec.	.65	6.05	2.45	3.60	.0070	.0474	.0362	.0112	.22	.007	.0000	.80	.79	.61	1015
Oct. 21.....	dist.	sl.	.76	5.55	2.35	3.00	.0038	.0374	.0342	.0032	.35	.004	.0000	.81	.95	.50	642
Nov. 24.....	sl.	v. sl.	.51	4.55	1.70	2.85	.0028	.0298	.0282	.0016	.34	.010	.0000	.75	.87	.50	584
Dec. 22.....	sl.	sl.	.62	3.85	1.60	2.25	.0012	.0204	.0194	.0010	.27	.006	.0000	.70	.79	.44	2449
Yearly avg.	sl.	sl.	.59	4.35	1.75	2.60	.0034	.0252	.0222	.0030	.25	.009	.0000	.67	.80	.55	668

Woonsocket Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the City of Woonsocket,
the sample being taken from the tap in the office of the Superintendent of the Woonsocket
Water Works.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 21.....	v. sl.	v. sl.	.41	3.90	1.05	2.85	.0040	.0126	.0116	.0010	.29	.008	.0000	.53	.79	.50	202
Feb. 19.....	v. sl.	v. sl.	.42	3.75	1.30	2.45	.0090	.0158	.0154	.0004	.25	.015	.0000	.50	.70	.60	324
Mar. 17.....	v. sl.	v. sl.	.39	3.15	1.25	1.90	.0006	.0138	.0120	.0018	.23	.010	.0000	.48	.56	.35	823
April 14.....	v. sl.	v. sl.	.41	2.85	1.50	1.35	.0004	.0170	.0148	.0022	.22	.008	.0000	.57	.79	.40	921
May 20.....	sl.	v. sl.	.55	3.70	1.85	1.85	.0018	.0186	.0184	.0002	.26	.006	.0000	.60	.79	.60	6262
June 23.....	v. sl.	sl.	.70	4.65	1.80	2.85	.0008	.0246	.0228	.0018	.19	.010	.0000	.65	1.11	.80	135
July 21.....	sl.	sl.	.56	3.65	1.75	1.90	.0010	.0248	.0220	.0028	.23	.010	.0000	.57	1.11	.70	1517
Aug. 26.....	sl.	dec.	.70	4.60	2.15	2.45	.0004	.0328	.0256	.0072	.20	.007	.0000	.78	.87	.50	387
Sept. 15.....	sl.	dec.	.60	4.65	1.85	2.80	.0022	.0394	.0308	.0086	.22	.007	.0000	.70	.79	.60	417
Oct. 21.....	dist.	sl.	.76	4.85	2.20	2.65	.0012	.0336	.0296	.0040	.31	.004	.0000	.81	1.11	.50	182
Nov. 24.....	sl.	v. sl.	.55	3.95	1.35	2.60	.0018	.0292	.0272	.0020	.34	.009	.0000	.72	.95	.50	378
Dec. 22.....	sl.	sl.	.60	4.05	1.25	2.80	.0006	.0182	.0182	.0000	.23	.008	.0000	.69	.95	.45	3844
Yearly avg....	sl.	sl.	.55	4.00	1.60	2.40	.0020	.0234	.0207	.0027	.25	.009	.0000	.63	.90	.55	1283

Woonsocket Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Woonsocket, giving the Average for the Years 1900-1902, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	RESIDUE ON EVAPORATION				AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Color.	Total.	Loss on Ignition.		Free.	Albuminoid.		Chlorine.	As Nitrates.	As Nitrites.					
						Total.	In Solution.								In Suspension.
Reservoir 3—															
1900.....	.82	4.85	2.85	2.00	.0010	.0507	.0350	.0157	.24	.006	.0000	.96	.75	.65	603
1901.....	.58	4.15	2.35	1.80	.0034	.0469	.0317	.0152	.22	.004	.0000	.82	.60	.50	819
1902.....	.56	3.80	2.10	1.70	.0061	.0384	.0277	.0107	.23	.005	.0000	.71	.55	.40	1068
Pumping Station—															
1900.....	.72	4.70	2.25	2.45	.0017	.0311	.0256	.0055	.25	.008	.0000	.81	.85	.70	668
1901.....	.63	4.20	2.00	2.20	.0032	.0247	.0231	.0016	.24	.006	.0000	.77	.90	.55	882
1902.....	.59	4.35	1.75	2.60	.0034	.0252	.0222	.0030	.25	.009	.0000	.67	.80	.55	668
Supt's Office—															
1900.....	.70	4.90	2.38	2.60	.0014	.0292	.0232	.0060	.24	.010	.0000	.77	.90	.75	370
1901.....	.64	4.65	2.10	2.55	.0017	.0277	.0226	.0051	.24	.007	.0000	.79	1.00	.60	1177
1902.....	.55	4.00	1.60	2.40	.0020	.0231	.0207	.0027	.25	.009	.0000	.63	.90	.55	1283

Pawtucket Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Pawtucket, the sample being taken from the Intake at the Happy Hollow Pond.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 27.....	v. sl.	dist.	.31	3.85	1.40	2.45	.0010	.0152	.0128	.0024	.32	.011	.0000	.45	1.27	.70	1508
Feb. 24.....	v. sl.	sl.	.20	4.10	1.05	3.05	.0008	.0104	.0104	.0000	.33	.013	.0000	.26	1.43	.90	235
Mar. 24.....	sl.	sl.	.25	4.05	1.25	2.80	.0012	.0206	.0192	.0014	.30	.006	.0000	.37	1.11	.58	295
April 28.....	v. sl.	sl.	.22	3.80	1.30	2.50	.0022	.0170	.0162	.0008	.34	.021	.0000	.31	1.50	.85	968
May 26.....	v. sl.	sl.	.20	4.10	1.25	2.85	.0032	.0248	.0198	.0050	.33	.016	trace.	.32	1.76	1.10	47
June 23.....	v. sl.	v. sl.	.18	4.45	1.70	2.75	.0024	.0184	.0178	.0006	.33	.007	.0000	.24	1.56	1.10	749
July 28....	v. sl.	v. sl.	.16	3.60	1.00	2.60	.0018	.0182	.0180	.0002	.30	.008	.0000	.24	1.19	.90	300
Aug. 25.....	0	v. sl.	.15	3.60	1.25	2.35	.0006	.0182	.0170	.0012	.30	.007	.0000	.26	1.19	1.05	50
Sept. 29.....	v. sl.	sl.	.15	3.35	1.10	2.25	.0028	.0246	.0228	.0018	.30	.007	.0000	.28	.95	.80	488
Oct. 29.....	v. sl.	v. sl.	.20	4.10	1.20	2.90	.0048	.0162	.0140	.0022	.34	.005	.0000	.35	1.27	1.09	141
Nov. 24.....	sl.	v. sl.	.16	4.00	1.30	2.70	.0022	.0158	.0150	.0008	.36	.007	.0000	.32	1.35	1.00	88
Dec. 29.....	v. sl.	v. sl.	.50	4.45	1.25	3.20	.0016	.0140	.0140	.0000	.33	.015	.0000	.59	1.35	.80	1086
Yearly avg....	v. sl.	sl.	.22	3.95	1.25	2.70	.0021	.0178	.0164	.0014	.32	.010	.0000	.33	1.35	.90	496

Pawtucket Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Pawtucket, the sample being taken from the tap in the Boiler room of Pumping Station No. 3.—Continued.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.		RESIDUE ON EVAPORATION.				AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Total.	In Solution.	In Suspension.	Chlorine.	As Nitrates.					As Nitrites.
Jan. 27.....	v. sl.	0	.31	3 55	1 35	2 20	.0012	.0114	.0114	.0000	.32	.011	.0000	45	1 27	.70	612
Feb. 24.....	v. sl.	trace	.19	4 10	1 10	3 00	.0012	.0094	.0090	.0004	.33	.016	.0000	24	1 56	.90	139
Mar. 24.....	v. sl.	v. sl.	.25	3 70	1 30	2 40	.0010	.0122	.0122	.0000	.31	.006	.0000	37	1 11	.60	141
April 28.....	v. sl.	v. sl.	.20	3 60	1 00	2 60	.0014	.0112	.0112	.0000	.34	.021	.0000	28	1 50	.85	Lost.
May 26.....	0	v. sl.	.20	3 90	1 20	2 70	.0020	.0130	.0128	.0002	.33	.016	.0000	26	1 76	1 10	252
June 23.....	v. sl.	0	.18	4 40	1 30	3 10	.0024	.0126	.0120	.0006	.33	.007	.0000	21	1 56	1 10	2356
July 28.....	v. sl.	v. sl.	.15	3 60	90	2 70	.0020	.0114	.0114	.0000	.28	.008	.0000	20	1 19	.90	1536
Aug. 25.....	0	v. sl.	.15	3 65	1 20	2 45	.0010	.0126	.0120	.0006	.30	.007	.0000	23	1 19	1 05	84
Sept. 29.....	v. sl.	v. sl.	.14	3 25	1 00	2 25	.0016	.0188	.0156	.0032	.30	.007	.0004	28	.95	.90	Lost.
Oct. 29.....	v. sl.	v. sl.	.20	3 65	90	2 75	.0020	.0134	.0126	.0008	.34	.006	.0000	31	1 27	1 12	25
Nov. 24.....	v. sl.	v. sl.	.15	3 95	1 75	2 20	.0020	.0128	.0124	.0004	.36	.009	.0000	22	1 43	1 00	10
Dec. 29.....	v. sl.	v. sl.	.50	4 40	1 50	2 90	.0018	.0128	.0122	.0006	.33	.015	.0000	56	1 43	.80	101
Yearly avg....	v. sl.	v. sl.	.22	3 80	1 20	2 60	.0016	.0126	.0120	.0006	.32	.011	.0000	30	1 35	.90	526

Pawtucket Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Pawtucket, giving the Average for the Years 1900-1902, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	RESIDUE ON EVAPO- RATION.				AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Color.	Total.	Loss on Ignition.		Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.					
						Total.	In Solution.	In Suspension.								
Intake—																
1900.....	.31	4.20	1.40	2.80	.0016	.0163	.0141	.0022	.29	.009	.0000	.35	1.35	1.00		915
1901.....	.31	4.25	1.45	2.80	.0013	.0169	.0159	.0010	.32	.008	.0000	.38	1.40	1.00		1135
1902.....	.22	3.95	1.25	2.70	.0021	.0178	.0164	.0014	.32	.010	.0000	.33	1.35	.90		496
Tap in Boiler Room—																
1900.....	.31	4.10	1.30	2.80	.0012	.0130	.0121	.0009	.29	.009	.0000	.33	1.35	1.00		815
1901.....	.31	4.15	1.35	2.80	.0008	.0139	.0136	.0003	.32	.009	.0000	.36	1.40	.95		3547
1902.....	.22	3.80	1.20	2.60	.0016	.0126	.0120	.0006	.32	.011	.0000	.30	1.35	.90		526

Bristol Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of Bristol, the sample being taken from the Kickemuit River, at the Pumping Station of the Bristol and Warren Water Works.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 6.....	trace	v. sl.	1.20	6.60	3.50	3.10	.0014	.0200	.0284	.0005	.60	.014	.0000	1.44	1.63	.30	692
Feb. 10.....	v. sl.	v. sl.	.64	6.25	2.55	3.70	.0022	.0254	.0232	.0022	.83	.012	.0000	.93	1.56	.55	3596
Mar. 3.....	sl.	sl.	.49	4.10	2.05	2.05	.0014	.0251	.0220	.0034	.28	.009	.0000	.81	.63	.25	.....
April 1.....	sl.	sl.	.88	5.65	2.50	.315	.0022	.0302	.0278	.0024	.58	.006	.0300	1.22	1.43	.50	737
May 5.....	sl.	sl.	1.24	6.75	3.35	3.40	.0054	.0412	.0360	.0052	.57	.005	.0000	1.62	2.42	.65	598
June 2.....	sl.	sl.	1.02	7.00	2.95	4.05	.0062	.0392	.0352	.0040	.96	.011	.0000	1.19	1.56	.91	*19654
July 1.....	v. sl.	v. sl.	.81	11.85	3.10	8.75	.0028	.0374	.0362	.0012	3.35	.003	.0000	1.08	2.21	1.05	13578
Aug. 1.....	v. sl.	sl.	.57	35.55	11.30	24.25	.0018	.0346	.0320	.0026	13.30	.006	.0000	.81	6.21	1.05	58280
Sept. 2.....	v. sl.	sl.	.45	15.55	3.50	12.05	.0016	.0378	.0364	.0014	5.35	.006	.0000	.74	3.12	1.25	26692
Oct. 1.....	sl.	sl.	.48	10.55	3.15	7.40	.0032	.0430	.0386	.0044	3.26	.006	.0000	.77	2.21	1.30	4650
Nov. 10.....	sl.	sl.	.52	9.30	2.50	6.80	.0036	.0394	.0366	.0028	2.24	.005	.0000	.82	2.02	1.10	377
Dec. 1.....	v. sl.	v. sl.	.58	9.85	2.60	7.25	.0032	.0360	.0336	.0021	2.48	.007	.0000	.85	2.34	1.25	3720
Yearly avg. . .	sl.	sl.	.71	10.75	3.60	7.15	.0029	.0349	.0322	.0027	2.82	.008	.0000	1.02	2.30	.85	12052

*Stood 2 days.

Bristol Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of Bristol, the sample being taken from the tap in the Office of the Town Clerk of Bristol.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.				Bacteria per c. c.		
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.		Free.	Albuminoid.			Chlorine.	As Nitrates.		Oxygen Consumed.		Hardness.	Alkalinity.
					Total.	In Solution.		In Suspension.	As Nitrates.	As Nitrites.							
Jan. 6.....	trace.	iron sl.	1.22	7.45	3.35	4.10	.0022	.0282	.0274	.0008	.60	.012	.0000	1.46	1.69	.35	354
Feb. 10.....	v. sl.	sl.	.64	6.55	2.40	4.15	.0022	.0250	.0218	.0032	.86	.012	.0000	.93	1.82	.70	6076
Mar. 3.....	sl.	sl.	.45	4.05	1.85	2.20	.0018	.0220	.0194	.0026	.30	.011	.0000	.69	.71	.30	4092
April 1.....	sl.	dist.	.79	5.35	2.05	3.30	.0028	.0282	.0248	.0034	.63	.008	.0000	1.04	1.69	.50	1646
May 5.....	sl.	sl.	1.22	7.10	3.20	3.90	.0024	.0378	.0346	.1032	.60	.009	.0000	1.56	2.47	.70	2046
June 3.....	sl.	dec.	1.04	8.10	3.45	4.65	.0028	.0464	.0366	.0098	.96	.016	.0000	1.31	1.95	1.09	4836
July 1.....	v. sl.	dist.	.81	13.25	3.10	10.15	.0016	.0406	.0346	.0060	3.85	.003	.0000	1.10	2.47	1.10	30380
Aug. 1.....	v. sl.	sl.	.56	33.90	9.65	24.25	.0022	.0340	.0304	.0036	12.89	.008	.0000	.81	6.07	1.20	30504
Sept. 2.....	v. sl.	dec.	.49	18.00	4.30	13.70	.0012	.0394	.0348	.0046	6.00	.009	.0000	.76	3.25	1.40	.....
Oct. 1.....	sl.	dec.	.46	11.35	2.45	8.90	.0014	.0470	.0384	.0086	3.30	.008	.0000	.85	2.34	1.40	1364
Nov. 10.....	sl.	sl.	.55	9.05	2.30	6.75	.0018	.0388	.0356	.0032	2.26	.008	.0000	.77	2.08	1.15	16678
Dec. 1.....	v. sl.	sl.	.62	10.10	2.40	7.70	.0022	.0348	.0328	.0020	2.55	.011	.0000	.84	2.21	1.30	.....
Yearly avg...	sl.	sl.	.74	11.20	3.40	7.80	.0021	.0352	.0309	.0043	2.90	.010	.0000	1.01	2.40	.95	9798

Bristol Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of Bristol, giving the Average for the Years 1900-1902, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPORA- TION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
		Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
						Total.	In Solution.	In Suspension.							
Pumping Station—															
1900.....	.99	11 25	4 00	7 25	.0035	.0439	.0356	.0083	3 00	.007	.0000	1 16	2 30	1 05	1764
1901.....	.81	9 30	3 15	6 15	.0029	.0358	.0323	.0035	2 04	.007	.0000	1 11	2 20	.85	2273
1902.....	.74	10 75	3 60	7 15	.0029	.0349	.0322	.0027	2 82	.008	.0000	1 02	2 30	.85	12052
Town Clerk's Office—															
1900*.....	.96	24 75	5 10	19 65	.0016	.0376	.0325	.0051	9 54	.011	.0000	1 07	3 75	1 15	13014
1901.....	.79	9 40	3 05	6 35	.0012	.0341	.0304	.0037	2 03	.008	.0000	1 06	2 35	.95	4528
1902.....	.74	11 20	3 40	7 80	.0021	.0352	.0309	.0043	2 90	.010	.0000	1 01	2 40	.95	9798

*One sample was very high in "salt water."

Narragansett Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the District of Narragansett,
the sample being taken from Rocky Brook, at the Pumping Station.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 30.....	v. sl.	v. sl.	.77	5.30	1.90	3.40	.0018	.0190	.0178	.0012	.63	.011	.0000	.83	.79	.40	900
Feb. 24.....	v. sl.	v. sl.	.46	4.70	1.55	3.15	.0026	.0118	.0112	.0006	.62	.021	.0000	.50	.79	.45	4464
Mar. 24.....	v. sl.	v. sl.	.63	3.75	1.60	2.15	.0008	.0144	.0142	.0002	.52	.010	.0000	.77	.71	.30	348
April 28.....	sl.	dist.	.77	4.65	1.70	2.95	.0052	.0186	.0168	.0018	.57	.015	.0000	.70	.70	.41	947
May 26.....	sl.	sl.	.70	4.55	1.80	2.75	.0032	.0236	.0218	.0018	.60	.011	.0000	.81	1.03	.59	231
June 24.....	dec.	sl.	.96	4.85	1.90	2.95	.0044	.0224	.0204	.0020	.49	.006	.0000	.74	.79	.60	2398
July 28.....	sl.	sl.	.80	5.05	2.05	3.00	.0046	.0236	.0210	.0026	.54	.009	.0000	.73	.55	.40	109
Aug. 25.....	sl.	sl.	.65	4.80	1.70	3.10	.0010	.0282	.0228	.0054	.56	.010	.0000	.73	.71	.70	788
Sept. 22.....	v. sl.	v. sl.	.75	5.30	1.65	3.65	.0016	.0248	.0230	.0018	.53	.004	.0000	.72	.63	....	289
Oct. 31.....	sl.	sl.	.71	5.50	1.40	4.10	.0036	.0196	.0182	.0014	.71	.006	.0000	.72	.86	.55	.....
Nov. 24.....	v. sl.	sl.	.65	4.95	1.30	3.65	.0026	.0210	.0184	.0026	.68	.006	.0000	.72	.71	.50	98
Dec. 29.....	v. sl.	sl.	1.10	5.60	2.15	3.45	.0030	.0244	.0236	.0008	.66	.013	.0000	1.18	1.11	.31	8370
Yearly avg.	sl.	sl.	.75	4.90	1.70	3.20	.0029	.0210	.0191	.0019	.59	.010	.0000	.76	.80	.45	1722

Narragansett Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the District of Narragansett, the sample being taken from the tap in the Office of the Water Company.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 30.....	v. sl.	v. sl.	.71	5.15	1.90	3.25	.0012	.0172	.0162	.0010	.65	.011	.0000	.74	.79	.45	135
Feb. 25.....	v. sl.	v. sl.	.41	4.65	1.80	2.85	.0010	.0114	.0102	.0012	.60	.027	.0000	.45	.95	.48	38
Mar. 24.....	v. sl.	v. sl.	.62	4.10	1.80	2.30	.0010	.0118	.0116	.0002	.53	.010	.0000	.68	.71	.30	57
April 28.....	sl.	v. sl.	.71	3.95	1.55	2.40	.0008	.0158	.0156	.0002	.57	.015	.0000	.72	.70	.43	82
May 26.....	sl.	sl.	.68	4.25	1.40	2.85	.0012	.0192	.0162	.0030	.63	.011	.0000	.70	.95	.60	197
June 24.....	dec.	sl.	.96	4.75	1.75	3.00	.0008	.0220	.0198	.0022	.56	.008	.0000	.76	.95	.65	101
July 28.....	sl.	sl.	.90	5.25	1.85	3.40	.0016	.0220	.0208	.0012	.51	.008	.0000	.77	.71	.40	2192
Aug. 25.....	dist.	sl.	.75	4.80	1.70	3.10	.0008	.0260	.0214	.0046	.58	.015	.0000	.73	.87	.50	315
Sept. 22.....	sl.	sl.	.75	5.35	1.80	3.55	.0010	.0198	.0194	.0004	.57	.007	.0000	.64	.70		2542
Oct. 31.....	sl.	v. sl.	.90	6.05	2.10	3.95	.0014	.0198	.0196	.0002	.73	.007	.0000	.87	.79	.50	*1754
Nov. 24.....	v. sl.	sl.	.65	4.75	1.35	3.40	.0010	.0166	.0158	.0008	.71	.007	.0000	.66	.79	.55	3
Dec. 29.....	v. sl.	0	1.06	5.65	2.35	3.30	.0014	.0224	.0224	.0000	.68	.017	.0000	1.09	1.27	.35	334
Yearly avg....	sl.	v. sl.	.76	4.90	1.80	3.10	.0011	.0187	.0174	.0013	.61	.012	.0000	.73	.85	.45	646

*Stood 4 days.

Narragansett Water Supply.

Chemical and Bacteriological Examination of a Water Supply in the District of Narragansett, taken from a supply known as the Gladstone Spring, the same being located at Narragansett Pier.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			As Nitrates.	As Nitrites.					
								Total.	In Solution.								In Suspension.
July 28.....	0	0	0	7.00	1.40	5.60	.0002	.0022	.....	.....	1.22	.070	.0000	.02	2.28	1.00	Lost
Aug. 25.....	0	0	0	7.35	1.85	5.50	.0000	.0010	.....	.....	1.20	.132	.0000	.01	2.08	.90	94
Sept. 22.....	0	0	0	7.00	1.25	5.75	.0006	.0012	.....	.....	1.20	.076	.0000	.03	2.21	.....	*
Yearly avg....	0	0	0	7.10	1.50	5.60	.0003	.0015	.....	.....	1.21	.093	.0000	.02	2.20	.95	.....

* Too numerous.

Narragansett Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the District of Narragansett, Giving the Average for the Years 1900-1902, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	RESIDUE ON EVAPORATION.				AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Color.	Total.	Loss on Ignition.		Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.					
				Fixed.		Total.	In Solution.	In Suspension.								
Narragansett Pier,																
Pumping Station—																
1900.....	.92	5 10 2 00 3 10			.0022	0256	0205	.0051	.60	.006	.0000	88	80	.70	1536	
1901.....	.85	5 35 2 25 3 10			.0022	0257	0223	.0034	.57	.006	.0000	94	90	.50	1017	
1902.....	.75	4 90 1 70 3 20			.0029	0210	0191	.0019	.59	.010	.0000	76	80	.45	1722	
Narragansett Pier,																
Office Water Co.—																
1900.....	.87	5 00 1 90 3 10			.0007	0196	0166	.0030	.60	.007	.0000	77	85	.70	1652	
1901.....	.88	5 40 2 20 3 20			.0005	0205	0188	.0017	.59	.007	.0000	87	1 15	.70	1505	
1902.....	.76	4 90 1 80 3 10			.0011	0187	0174	.0013	.61	.012	.0000	73	85	.45	646	

Newport Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Newport, the sample being taken from the South Reservoir at the Intake.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 13.....	dist.	sl.	.32	8.10	2.40	5.70	.0146	.0430	.0318	.0112	1.45	.058	trace.	.68	2.67	1.60	1922
Feb. 11.....	dist.	sl.	.29	8.40	2.50	5.90	.0016	.0498	.0314	.0184	1.55	.053	.0000	.67	2.60	1.60	262
Mar. 10.....	dec.	dist.	.31	7.35	2.85	4.50	.0100	.0436	.0342	.0094	1.08	.105	.0002	.59	2.21	.90	8618
April 7.....	dec.	dist.	.27	7.70	2.30	5.40	.0034	.0434	.0344	.0090	1.25	.127	.0006	.65	2.67	1.19	501
May 12.....	dec.	dec.	.37	7.50	2.40	5.10	.0042	.0566	.0392	.0174	1.40	.022	.0014	.67	2.73	1.80	27
June 9.....	dec.	dec.	.34	8.20	2.95	5.25	.0016	.0526	.0354	.0172	1.45	.003	.0000	.65	2.60	1.89	3224
July 7.....	dist.	dec.	.25	8.00	2.60	5.40	.0020	.0504	.0406	.0098	1.55	.005	.0000	.58	2.47	1.90	320
Aug. 4.....	dist.	dec.	.21	9.10	4.60	4.50	.0040	.1048	.0544	.0504	1.33	.003	.0000	.69	2.41	1.90	1714
Sept. 8.....	sl.	sl.	.20	10.35	4.00	6.35	.0016	.0514	.0426	.0088	1.75	.005	.0000	.66	2.47	2.00	446
Oct. 13.....	v. sl.	sl.	.15	9.30	3.20	6.10	.0042	.0442	.0400	.0042	1.85	.001	.0000	.69	2.86	2.20	331
Nov. 10.....	v. sl.	v. sl.	.15	8.95	2.90	6.05	.0022	.0428	.0386	.0042	2.00	.003	.0000	.58	2.60	1.95	424
Dec. 8.....	v. sl.	sl.	.23	9.40	2.45	6.95	.0042	.0470	.0420	.0050	2.25	.005	.0000	.61	2.73	1.95	771
Yearly avg. . . .	dist.	dist.	.26	8.55	2.95	5.60	.0045	.0525	.0387	.0138	1.58	.033	.0002	.64	2.60	1.75	1547

Newport Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Newport, the sample being taken from the tap in the Cottage of the Engineer of the Newport Water Works.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 13.....	sl.	sl.	30	8.65	2.95	5.70	.0222	.0370	.0312	.0058	1.59	.073	trace.	.61	2.80	1.90	1294
Feb. 11.....	sl.	sl.	.29	8.45	2.75	5.70	.0044	.0366	.0314	.0052	1.55	.062	.0000	.65	2.60	1.60	357
Mar. 10.....	dist.	sl.	.25	7.05	2.20	4.85	.0106	.0352	.0294	.0058	1.30	.096	.0002	.49	2.34	1.02	7254
April 7.....	sl.	sl.	.25	7.60	2.45	5.15	.0048	.0344	.0258	.0086	1.55	1.9	.0002	.58	2.67	1.10	362
May 12.....	dist.	sl.	.30	7.50	2.10	5.40	.0044	.0364	.0290	.0074	1.65	.047	.0002	.52	2.86	1.80	89
June 9.....	dec.	dec.	.34	8.85	2.35	6.50	.0030	.0428	.0320	.0108	1.65	.017	.0000	.60	2.67	1.85	1135
July 7.....	sl.	sl.	.21	8.49	2.60	5.80	.0034	.0332	.0302	.0030	1.75	.016	.0000	.42	2.86	1.90	836
Aug. 4.....	sl.	dec.	.21	10.10	3.90	6.20	.0546	.0730	.0534	.0196	1.75	.015	.0006	.59	3.12	2.30	1067
Sept. 8.....	sl.	sl.	.17	10.65	3.85	6.80	.0020	.0412	.0380	.0032	1.90	.007	.0000	.54	2.93	2.10	1493
Oct. 13.....	v. sl.	v. sl.	.15	9.40	2.95	6.45	.0032	.0384	.0368	.0016	2.10	.012	.0000	.65	3.12	2.30	307
Nov. 10.....	v. sl.	v. sl.	.15	11.75	2.35	9.40	.0024	.0376	.0346	.0030	2.25	.015	.0000	.55	2.86	2.05	147
Dec. 8.....	v. sl.	v. sl.	.20	9.50	2.30	7.20	.0068	.0410	.0404	.0006	2.40	.017	.0000	.56	2.86	1.95	489
Yearly avg. . . .	sl.	sl.	.24	9.00	2.75	6.25	.0102	.0406	.0344	.0062	1.79	.012	.0001	.56	2.80	1.80	1236

Newport Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Newport, the sample being taken from the tap in the office of the Board of Health of the City of Newport.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 13.....	sl.	sl.	.35	9.35	2.85	6.50	.0214	.0422	.0324	.0098	1.65	.073	trace.	.63	2.99	2.15	1186
Feb. 11.....	sl.	v. sl.	.29	10.35	3.25	7.10	.0048	.0414	.0300	.0114	2.10	.097	.0000	.60	2.93	1.90	487
Mar. 10.....	dist.	sl.	.25	7.70	2.45	5.25	.0054	.0344	.0276	.0068	1.40	.100	.0004	.50	2.54	1.08	9920
April 7.....	sl.	sl.	.25	9.60	2.85	6.75	.0102	.0314	.0252	.0062	1.55	.129	.0006	.56	3.19	1.61	1798
May 12.....	dist.	sl.	.30	8.45	2.20	6.25	.0028	.0350	.0266	.0084	1.65	.086	.0000	.55	2.93	1.80	114
June 16.....	dec.	dec.	.33	8.20	2.70	5.50	.0020	.0436	.0290	.0146	1.65	.019	.0002	.53	2.93	1.90	164
July 7.....	dist.	dec.	.23	9.00	2.10	6.90	.0016	.0370	.0278	.0092	1.75	.018	.0000	.45	2.80	1.95	902
Aug. 4.....	sl.	dec.	filt. .20	14.35	5.35	9.00	.0058	.0954	.0338	.0616	1.80	.030	.0006	.80	3.32	2.40	2914
Sept. 8.....	sl.	dec.	.15	10.75	3.90	6.85	.0020	.0402	.0328	.0074	1.90	.018	.0000	.49	2.99	1.90	361
Oct. 13.....	v. sl.	sl.	.15	9.85	2.60	7.25	.0022	.0424	.0340	.0084	2.08	.016	.0000	.58	3.12	2.30	140
Nov. 10.....	v. sl.	sl.	.15	9.35	2.80	6.55	.0014	.0352	.0328	.0024	2.25	.016	.0000	.47	2.86	2.10	104
Dec. 8.....	v. sl.	v. sl.	.20	9.60	1.95	7.65	.0050	.0402	.0374	.0028	2.40	.018	.0000	.47	2.86	2.00	554
Yearly avg. . . .	sl.	sl.	.24	9.70	2.90	6.80	.0054	.0432	.0308	.0124	1.85	.052	.0002	.55	2.95	1.90	1554

Newport Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Newport, giving the Average for the Years 1900-1902, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON ENAPO- RATION.			Free.	AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
		Total.	Loss on Ignition.			Total.	Albuminoid.			As Nitrates.	As Nitrites.					
			Fixed.				In Solution.	In Suspension.								
Newport, Intake—																
1900 . . . . .	.39	9.50	3.15	6.35	.0056	.0560	.0372	.0188	1.80	.009	.0001	.66	2.60	2.10	1235	
1901 . . . . .	.30	9.10	3.35	5.75	.0230	.0540	.0405	.0135	1.57	.019	.0004	.65	2.70	1.90	1820	
1902 . . . . .	.26	8.55	2.95	5.60	.0045	.0525	.0387	.0138	1.58	.033	.0002	.64	2.60	1.75	1547	
Newport, Eng. Cottage—																
1900 . . . . .	.25	9.70	2.90	6.80	.0059	.0387	.0329	.0058	2.08	.012	.0001	.49	2.95	2.10	1755	
1901 . . . . .	.25	9.30	2.95	6.35	.0208	.0383	.0338	.0045	1.75	.027	.0001	.51	2.95	1.95	6162*	
1902 . . . . .	.24	9.00	2.75	6.25	.0102	.0406	.0344	.0062	1.79	.042	.0001	.56	2.80	1.80	1236	
Newport, Board of Health—																
1900 . . . . .	.23	10.55	3.45	7.10	.0055	.0489	.0413	.0076	2.02	.015	.0000	.58	2.95	2.05	563	
1901 . . . . .	.23	9.55	2.90	6.65	.0145	.0388	.0342	.0046	1.76	.029	.0002	.51	3.00	2.10	2428	
1902 . . . . .	.24	9.70	2.90	6.80	.0054	.0432	.0308	.0124	1.85	.052	.0002	.55	2.95	1.90	1554	

* Includes one high bacteria count.

Jamestown Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of Jamestown,
the sample being taken from the North Pumping Station*

(Parts per 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			As Nitrates.	As Nitrites.					
								Total.	In Solution.								In Suspension.
Jan. 7.....	v. sl.	v. sl.	.35	8.20	2.65	5.55	.0032	.0146	.0144	.0002	1.50	.176	.0000	.54	2.60	.73	968
Feb. 10.....	v. sl.	v. sl.	.52	5.80	2.40	3.40	.0028	.0300	.0242	.0058	1.09	.038	.0000	.90	1.43	.71	116
Mar. 10.....	v. sl.	v. sl.	.32	4.90	1.50	3.40	.0014	.0172	.0170	.0002	.85	.052	.0000	.55	1.43	.40	3534
April 9†.....	v. sl.	v. sl.	.51	6.15	2.20	3.95	.0024	.0236	.0224	.0012	.73	.031	.0000	.75	1.63	.61	4340
May 13.....	v. sl.	v. sl.	.63	5.65	1.90	3.75	.0050	.0306	.0278	.0028	.98	.038	.0000	.80	1.50	.95	1637
June 9.....	0	0	.00	4.10	.55	3.55	.0002	.0016	.0016	.0000	.75	.040	.0000	.00	.95	.36	*
July 7.....	sl.	sl.	1.10	8.80	3.35	5.45	.0044	.0526	.0444	.0082	1.10	.010	.0010	1.27	2.08	1.60	11160
Aug. 3.....	v. sl.	sl.	.95	10.25	5.10	5.15	.0062	.0530	.0474	.0056	1.10	.021	.0000	1.04	2.08	1.80	600
Sept. 7.....	dist.	sl.	.91	8.00	3.65	4.35	.0022	.0778	.0694	.0084	1.05	.008	.0000	1.17	1.27	.95	3658
Oct. 7.....	sl.	sl.	.69	8.60	3.45	5.15	.0056	.0446	.0414	.0032	1.20	.050	.0002	.94	2.21	1.02	17849
Nov. 10.....	v. sl.	sl.	.65	9.70	3.30	6.40	.0022	.0448	.0388	.0060	1.60	.016	.0000	.92	2.47	1.05	132
Dec. 15.....	v. sl.	sl.	.50	8.80	3.10	5.70	.0058	.0286	.0234	.0052	1.55	.069	trace.	.78	2.28	1.35	1452
Yearly avg. . . .	v. sl.	v. sl. to sl.	.65	7.70	2.95	4.75	.0037	.0379	.0337	.0042	1.16	.046	.0001	.88	1.90	1.00	4131

* Too numerous.

† This sample from a well supply not included in average.

Jamestown Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of Jamestown,
the sample being taken from the South Pumping Station.*

(Parts in 100,000.)

DATE OF COLLECTION	APPEARANCE.			RESIDUE ON EVAPORA- TION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 7.....	0	0	0	12.15	2.30	9.85	.0004	.0020			2.83	.492	.0000	03.4	23.1	23	290
Feb. 10.....	0	0	0	12.50	3.80	8.70	.0002	.0010			3.25	.476	.0000	01.4	16.1	10	1052
Mar. 10.....	0	0	0	12.50	2.70	9.80	.0002	.0020			2.95	.528	.0000	03.4	03.1	1.15	839
April 9.....	0	0	0	12.15	4.25	7.90	.0002	.0020			2.30	.492	.0000	05.3	90	.98	362
May 13.....	0	0	.02	10.30	2.70	7.60	.0008	.0034			2.20	.370	.0000	09.3	64.1	00	717
June 9.....	0	0	0	13.90	3.90	10.00	.0004	.0028			2.80	.316	.0000	03.3	90.1	02	27094
July 7.....	0	v. sl.	.10	14.70	4.10	10.60	.0004	.0040			2.70	.264	.0002	26.4	23.7	75	1364
Aug. 3.....	0	v. sl.	.05	14.35	5.05	9.30	.0034	.0052			2.70	.316	.0000	14.4	16.1	70	656
Sept. 7.....	0	0	.04	13.15	4.30	8.85	.0006	.0030			2.93	.353	.0000	08.5	43.1	50	614
Oct. 7.....	0	v. sl.	.01	12.25	4.20	8.05	.0000	.0042			2.80	.352	.0000	08.3	97.1	40	21328
Nov. 10.....	0	v. sl.	0	17.30	4.95	12.35	.0000	.0046			4.25	.352	.0002	07.5	14.1	30	23746
Dec. 8.....	0	sl.	.04	15.55	3.60	11.95	.0018	.0070			3.73	.440	.0000	09.4	57.1	15	870
Yearly avg.	0	0 to v. sl.	.02	13.40	3.80	9.60	.0007	.0034			2.95	.396	.0000	08.4	30.1	25	6578

Jamestown Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of Jamestown, the sample being taken from tap in the store of J. Watson, located on the distal end of the supply pipes.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORA- TION.			AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			As Nitrates.	As Nitrites.					
								Total.	In Solution.								In Suspension.
Jan. 7.	0	v. sl.	.44	9.10	3.10	6.00	.0010	.0166	.0156	.0010	1.65	.176	.0000	.60	2.93	1.55	258
Feb. 10.	v. sl.	0	.25	9.95	3.20	6.75	.0006	.0106	.0102	.0004	2.23	.273	.0000	.34	3.25	1.20	316
Mar. 10.	v. sl.	v. sl.	.25	4.90	1.40	3.50	.0008	.0132	.0132	.0000	.85	.045	.0000	.42	1.56	.98	829
April 9.	v. sl.	v. sl.	.35	12.05	3.30	8.75	.0008	.0156	.0140	.0016	1.25	.185	.0000	.49	2.60	1.45	579
May 13.	v. sl.	v. sl.	.45	6.80	1.90	4.90	.0008	.0216	.0196	.0020	1.25	.210	.0000	.58	2.41	1.60	37
June 9.	sl.	dec.	.75	9.20	3.45	5.75	.0024	.0394	.0350	.0044	1.23	.042	.0000	1.06	2.28	1.70	liq.
July 7.	sl.	sl.	.60	12.05	4.30	7.75	.0018	.0292	.0242	.0050	1.79	.220	.0004	.67	3.71	2.45	3658
Aug. 4.	v. sl.	v. sl.	.10	16.10	5.10	11.00	.0000	.0158	.0082	.0076	2.85	.422	.0000	.20	4.11	1.60	*
Sept. 8.	sl.	dec.	.90	8.80	4.20	4.60	.0030	.0838	.0690	.0148	1.10	.013	.0000	1.27	1.56	1.20	610
Oct. 7.	sl.	sl.	.75	8.85	3.75	5.10	.0018	.0452	.0418	.0034	1.12	.055	.0000	.89	2.41	1.55	6682
Nov. 10.	v. sl.	sl.	.68	9.80	2.85	6.95	.0026	.0446	.0378	.0068	1.88	.015	.0000	1.00	2.86	1.45	707
Dec. 8.	v. sl.	v. sl.	.66	10.10	2.45	7.65	.0028	.0286	.0274	.0012	1.58	.063	.0000	.93	3.12	1.48	832
Yearly avg.	v. sl.	sl.	52	9.80	3.25	6.55	.0015	.0303	.0263	.0040	1.57	.143	.0000	.70	2.75	1.50	1451

* Too numerous.

Jamestown Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of Jamestown,
Giving the Average for the years 1900-1902, Grouped for Comparison of the Quality of
the Water at Different Points of the Supply.*

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPORATION.			Free.	AMMONIA.			Chlorine.	NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
		Total.	Loss on Ignition.	Fixed.		Albuminoid.				As Nitrates.	As Nitrites.					
						Total.	In Solution.	In Suspension.								
Jamestown,																
No. Pump'g Sta'n—																
1900.....	.63	9 65 3	10 6 5	.5	.0035	.0336	.0269	.0067	1 27	.071	.0001	.77 2 25	1.05			4794
1901.....	.86	8 25 3	45 4 80		.0035	.0441	.0409	.0032	1 32	.020	.0000	1.16 1 90	.90			2176
1902.....	.65	7.70	2 95 4	75	.0037	.0379	.0337	.0042	1 16	.016	.0001	.88 1 90	1 00			4131
Jamestown,																
So. Pump'g Sta'n—																
1900.....	.03	10.25	2 95 7	30	.0001	.0030	.0029	.0001	2 02	.243	.0000	.05 3 50	1 50			842
1901.....	.08	12 40 4	10 8 30		.0006	.0067	.0063	.0001	2 29	.335	.0001	.14 4 00	1 30			925
1902.....	.02	13 40 3	80 9 60		.0007	.0034			2 95	.306	.0000	.08 4 30	1 25			6578
Jamestown,																
Watson's Store—																
1900.....	.44	10.35	2 90 7	45	.0010	.0202	.0194	.0008	1 60	.105	.0000	.52 3 40	2 10			723
1901.....	.45	10 35 3	60 6 75		.0014	.0226	.0210	.0016	1 75	.177	.0001	.60 3 30	1 75			11016
1902.....	.52	9 80 3	25 6 55		.0015	.0303	.0263	.0040	1 57	.143	.0000	.70 2 75	1 50			1451

Westerly Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of Westerly,
the sample being taken from the Pumping Station of the Westerly Water Works.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 1.....	0	0	0	5.45	.95	4.50	.0000	.0014			.58	.056	.0000	0	2.02	1.60	.....
Feb. 3.....	0	0	0	5.20	.85	4.35	.0002	.0012			.59	.060	.0000	0	2.08	1.50	Lost.
Mar. 3.....	0	0	0	5.10	.60	4.50	.0004	.0018			.58	.058	.0000	0	2.08	1.50	5
April 1.....	0	0	0	5.25	1.10	4.15	.0000	.0020			.57	.056	.0000	0	1.95	1.50	1
May 6.....	0	0	0	5.05	.80	4.25	.0004	.0018			.57	.056	.0000	0	2.15	1.50	54
June 3.....	0	0	0	4.85	1.05	3.80	.0004	.0010			.57	.066	.0000	0	2.08	1.50	.....
July 1.....	0	0	0	5.05	1.05	4.00	.0004	.0016			.57	.050	.0000	0	1.95	1.40	4
Aug. 1.....	0	0	0	5.20	1.45	3.75	.0004	.0010			.56	.042	.0000	0	1.95	1.40	.....
Sept. 2.....	0	0	0	5.00	.65	4.35	.0000	.0014			.53	.040	.0000	0	1.82	1.10	.....
Oct. 6.....	0	0	0	5.10	.65	4.45	.0002	.0012			.56	.036	.0000	0	1.95	1.55	123
Nov. 10.....	0	0	0	5.85	1.05	4.80	.0000	.0020			.56	.042	.0000	.01	1.76	1.60	38
Dec. 1.....	0	0	0	5.20	.60	4.60	.0000	.0016			.57	.032	.0000	0	1.69	1.60	7
Yearly avg. . . .	0	0	0	5.20	.90	4.30	.0002	.0015			.57	.050	.0000	0	1.95	1.50	33

Westerly Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of Westerly,
the sample being taken from the tap at the Drinking Fountain at the Railroad Station.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 1.....	0	0	0	5.25	1.20	4.05	.0002	.0012			.58	.056	.0000	0	2.02	1.60	.....
Feb. 3.....	0	0	0	5.20	1.00	4.20	.0002	.0012			.58	.060	.0000	0	2.08	1.50	Lost.
Mar. 3.....	0	0	0	5.05	.55	4.50	.0002	.0018			.58	.058	.0000	0	2.08	1.50	3
April 1.....	0	0	0	5.10	.90	4.20	.0000	.0022			.57	.056	.0000	0	1.95	1.50	3
May 6.....	0	0	0	4.80	1.25	3.55	.0000	.0018			.58	.056	.0000	0	2.15	1.50	2
June 3.....	0	0	0	4.70	.95	3.75	.0000	.0014			.57	.062	.0000	0	2.03	1.50	313
July 2.....	0	0	0	5.05	1.05	4.00	.0000	.0022			.57	.050	.0000	0	1.95	1.40	18
Aug. 1.....	0	0	0	5.20	1.40	3.80	.0002	.0010			.56	.042	.0000	0	1.95	1.40	65
Sept. 2.....	0	0	0	5.00	.60	4.40	.0000	.0014			.53	.040	.0000	0	1.82	1.10	.....
Oct. 6.....	0	0	0	5.20	.80	4.40	.0000	.0012			.55	.036	.0000	0	1.95	1.55	96
Nov. 10.....	0	0	0	5.60	1.10	4.50	.0000	.0018			.56	.042	.0000	.01	1.82	1.64	19
Dec. 1.....	0	0	0	5.00	.65	4.35	.0000	.0010			.57	.032	.0000	0	1.69	1.60	2
Yearly avg....	0	0	0	5.10	.95	4.15	.0001	.0015			.57	.049	.0000	0	1.95	1.50	58

Westerly Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of Westerly, Giving the Average for the Years 1900-1902, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
		Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
						Total.	In Solution.	In Suspension.							
Westerly, Pumping Station—															
1900.	0	5.30	1.25	4.05	.0000	.0016			.59	.056	.0000	.01	1.80	1.50	1130
1901.	0	5.40	1.25	4.15	.0001	.0016			.58	.059	.0000	.01	2.00	1.55	96
1902.	0	5.20	.90	4.30	.0002	.0015			.57	.050	.0000	0	1.95	1.50	33
Westerly, Drinking Fountain—															
1900.	0	5.35	1.25	4.10	.0000	.0014			.59	.056	.0000	0	1.80	1.45	340
1901.	0	5.45	1.25	4.20	.0001	.0015			.58	.059	.0000	.02	2.00	1.55	520
1902.	0	5.10	.95	4.15	.0001	.0015			.57	.049	.0000	0	1.95	1.50	58

East Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of East Providence, the sample being taken from the Ten Mile River, at the Pumping Station at Hunt's Mills.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITROGEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			As Nitrates.	As Nitrites.					
								Total.	In Solution.	In Suspension.			Chlorine.				
Jan. 1.....	dist.	sl.	.71	4.95	1.95	3.00	.0048	.0204	.0200	.0004	.42	.016	.0004	.85	1.35	43	2542
Jan. 7.....	v. sl.	sl.	.59	5.85	1.95	3.90	.0090	.0162	.0156	.0006	.53	.028	.0006	.71	1.82	.60	958
Jan. 15.....	v. sl.	sl.	.44	6.55	1.75	4.80	.0160	.0156	.0142	.0014	.75	.035	.0016	.58	1.95	.91	1239
Jan. 22.....	v. sl.	v. sl.	.41	6.65	1.95	4.70	.0192	.0160	.0144	.0016	.66	.050	.0006	.58	2.08	.75	5952
Monthly avg....	sl.	sl.	.54	6.00	1.90	4.10	.0123	.0170	.0160	.0010	.59	.032	.0008	.68	1.80	.67	2673
Feb. 4.....	sl.	sl.	.44	5.35	1.65	3.70	.0118	.0160	.0154	.0006	.58	.035	.0010	.58	1.82	.70	2666
Mar. 5.....	v. sl.	v. sl.	.37	3.30	1.15	2.15	.0028	.0178	.0154	.0024	.27	.015	.0002	.61	1.27	.29	6448
April 2.....	sl.	sl.	.66	5.00	2.00	3.00	.0024	.0224	.0212	.0012	.50	.016	.0000	.77	1.76	.71	91
May 2.....	sl.	sl.	.70	6.60	1.85	4.75	.0030	.0290	.0254	.0036	.54	.025	.0004	.93	1.82	.80	3906
June 3.....	sl.	dec.	.56	5.85	1.70	4.15	.0020	.0258	.0200	.0058	.65	.026	.0004	.67	2.08	1.23	355
July 2.....	v. sl.	v. sl.	.50	6.15	2.20	3.95	.0028	.0244	.0222	.0022	.62	.010	.0004	.59	1.82	.98	191
Aug. 1.....	sl.	sl.	.50	6.55	2.35	4.20	.0008	.0306	.0224	.0082	.73	.011	.0002	.63	2.03	1.10	339
Sept. 3.....	v. sl.	sl.	.32	6.90	1.40	5.50	.0032	.0234	.0186	.0048	.88	.010	.0000	.40	2.08	1.30	549
Oct. 2.....	sl.	sl.	.25	7.35	1.05	6.30	.0064	.0184	.0156	.0028	1.01	.020	.0006	.42	2.47	1.40	565
Nov. 5.....	sl.	dec.	.60	9.10	3.05	6.05	.0058	.0320	.0222	.0098	.94	.031	.0010	.79	2.34	.81	847
Dec. 1.....	dist.	sl.	.50	7.75	1.70	6.05	.0092	.0246	.0232	.0014	.94	.025	.0016	.58	2.08	.79	2232
Yearly avg	sl.	sl.	.50	6.25	1.85	4.40	.0066	.0222	.0191	.0031	.67	.024	.0006	.65	1.90	.85	1925

East Providence Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of East Providence,
the sample being the Effluent of the Mechanical Filter, at Hunt's Mills.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 1.	0	0	.20	4.90	1.55	3.35	.0050	.0092			.41	.016	.0004	.41	1.95	.30	131
Jan. 7.	0	0	.10	5.40	1.25	4.15	.0084	.0074			.47	.027	.0006	.25	2.21	.26	22
Jan. 15.	0	0	.05	6.60	.90	5.70	.0148	.0066			.70	.040	.0016	.17	2.47	.03	23
Jan. 22.	0	0	.05	6.80	1.45	5.35	.0188	.0046			.63	.025	.0006	.12	2.47	.09	2
Monthly avg. . .	0	0	.10	5.93	1.29	4.64	.0118	.0070			.55	.027	.0008	.24	2.28	.11	45
Feb. 4.	0	0	.05	5.00	1.20	3.80	.0098	.0064			.49	.035	.0010	.15	1.95	.02	8
Mar. 5.	0	0	.05	3.85	1.05	2.80	.0028	.0066			.25	.014	.0002	.22	1.82	.44	471
April 2.	0	0	.05	4.50	1.05	3.45	.0010	.0080			.45	.016	.0002	.15	1.82	.02	1
May 2.	0	0	.05	5.00	.65	4.35	.0028	.0082			.49	.017	.0006	.20	2.08	.10	15
June 3.	0	0	.07	5.40	1.35	4.05	.0012	.0100			.61	.018	.0006	.21	2.15	.47	16
July 2.	0	0	.04	6.15	1.35	4.80	.0028	.0088			.71	.015	.0006	.14	2.08	.24	4
Aug. 1.	0	0	.05	6.45	1.85	4.60	.0004	.0088			.72	.012	.0002	.16	2.21	.35	22
Sept. 3.	0	0	.03	7.10	1.10	6.00	.0014	.0066			.88	.010	.0000	.10	2.34	.20	2
Oct. 2.	0	0	.03	7.45	.75	6.70	.0058	.0060			1.01	.020	.0006	.09	2.60	.55	0
Nov. 5.	0	0	.10	7.75	2.20	5.55	.0050	.0096			.91	.031	.0008	.25	2.60	.08	23
Dec. 1.	0	0	.05	7.55	1.10	6.45	.0080	.0092			.94	.030	.0016	.17	2.55	.02	30
Yearly avg. . . .	0	0	.06	6.00	1.25	4.75	.0059	.0077			.64	.022	.0006	.19	2.20	.10	51

Test for alum negative to plus.

East Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of East Providence, Giving the Average for the Years 1900-1902, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	RESIDUE ON EVAPORATION.				AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
						Total.	In Solution.	In Suspension.							
East Providence, Pumping Station—															
1900 . . . . .	.58	6.50	2.00	4.50	.0026	.0234	.0205	.0029	.69	.017	.0003	.58	1.85	1.10	730
1901 . . . . .	.51	6.60	2.10	4.50	.0074	.0233	.0209	.0024	.76	.030	.0008	.58	2.10	.95	5591
1902 . . . . .	.50	6.25	1.85	4.40	.0066	.0222	.0191	.0031	.67	.024	.0006	.65	1.90	.85	1925
East Providence, Mechanical Filter—															
1900 . . . . .	.08	6.15	1.65	4.50	.0022	.0086			.66	.018	.0003	.18	2.10	.35	18
1901 . . . . .	.05	6.50	1.50	5.00	.0067	.0084			.73	.026	.0008	.17	2.35	.20	34
1902 . . . . .	.06	6.00	1.25	4.75	.0059	.0077			.64	.022	.0006	.19	2.20	.10	51

New Shoreham Water Supply.

Chemical and Bacteriological Examination of the sample taken from Fresh Pond, in the Town of New Shoreham.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Prec.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 6.....	v. sl.	v. sl.	.05	8.40	2.35	6.05	.0152	.0398	.0342	.0056	2.75	.002	.0000	.42	1.43	.70	163
Feb. 4.....	v. sl.	v. sl.	.06	8.55	2.50	6.05	.0172	.0416	.0374	.0042	2.60	.007	.0000	.40	1.43	.50	475
Mar. 3.....	v. sl.	sl.	.05	4.65	.80	3.85	.0088	.0226	.0212	.0014	1.48	.004	.0000	.22	.79	.31	.....
April 1.....	v. sl.	v. sl.	.07	7.25	2.00	5.25	.0090	.0374	.0314	.0060	2.59	.006	.0000	.44	1.34	.52	398
May 7... ..	v. sl.	dec.	.07	7.95	1.65	6.30	.0054	.0386	.0346	.0040	2.60	.005	.0000	.46	1.35	.51	.....
June 7.....	sl.	dist.	.09	9.10	2.80	6.30	.0098	.0500	.0380	.0120	2.63	.003	.0000	.43	1.27	.60	Liq.
July 7.....	sl.	sl.	.11	8.95	3.15	5.80	.0022	.0742	.0352	.0120	2.50	.003	.0000	.40	1.27	.55	2852
Aug. 1.....	dist.	sl.	.10	9.50	4.50	5.00	.0020	.0524	.0350	.0174	2.63	.001	.0000	.35	1.69	.55	791
Sept. 1.....	dist.	dec.	.10	11.80	4.75	7.05	.0034	.0786	.0390	.0396	2.55	.002	.0000	.68	1.11	.60	6570
Oct. 1.....	dec.	sl.	.20	10.20	4.40	5.80	.0042	.0968	.0380	.0588	2.70	.005	.0000	.62	1.35	.70	1731
Nov. 11.....	sl.	sl.	.11	8.70	2.30	6.40	.0234	.0600	.0412	.0188	2.65	.005	.0000	.42	1.43	.70	646
Dec. 1.....	sl.	sl.	.05	8.60	2.10	6.50	.0344	.0526	.0406	.0120	2.65	.006	.0000	.32	1.27	.80	658
Yearly avg....	sl.	sl.	.09	8.65	2.80	5.85	.0113	.0515	.0355	.0160	2.53	.004	.0000	.43	1.30	.60	1587

* This pond not used as part of the supply.

New Shoreham Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of New Shoreham
the sample being taken from Sands' Pond, at the Intake.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.					NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 6.....	v. sl.	v. sl.	.16	8.20	1.55	6.65	.0010	.0164	.0150	.0014	2.85	.000	.0000	.12	1.69	.70	1922
Feb. 4.....	v. sl.	v. sl.	.10	7.85	1.65	6.20	.0006	.0150	.0136	.0014	2.85	.003	.0000	.14	1.82	.55	19
Mar. 3.....	v. sl.	v. sl.	.10	7.60	.95	6.65	.0006	.0148	.0148	.0000	2.62	.002	.0000	.12	1.69	.69	19964
April 1.....	v. sl.	sl.	.07	7.25	1.25	6.00	.0010	.0124	.0122	.0002	2.60	.021	.0000	.13	2.08	.81	962
May 7.....	v. sl.	dec.	.13	7.75	.85	6.90	.0006	.0170	.0142	.0028	2.65	.006	.0000	.15	1.82	1.00	12028
June 7.....	v. sl.	v. sl.	.12	8.70	2.00	6.70	.0002	.0144	.0144	.0000	2.70	.004	.0000	.12	1.95	1.00	134
July 7.....	v. sl.	sl.	.05	8.80	1.90	6.90	.0006	.0148	.0124	.0024	2.73	.003	.0000	.15	1.69	.70	471
Aug. 1.....	sl.	v. sl.	.10	9.75	2.55	7.20	.0024	.0288	.0238	.0050	2.83	.002	.0000	.47	2.34	.60	30318
Sept. 1.....	0	v. sl.	.07	13.75	5.55	8.20	.0008	.0250	.0210	.0010	5.30	.075	.0000	.36	4.62	1.44	5456
Oct. 1.....	dec.	algae dec.	? iron br.	18.60	7.35	11.25	.0620	.2136	.1344	.0792	4.05	.012	.0000	2.22	2.21	1.65	168400
Nov. 11.....	v. sl.	v. sl.	.10	9.90	1.40	8.50	.0012	.0170	.0160	.0010	2.90	.039	.0000	.14	2.73	2.10	289
Dec. 1.....	0	v. sl.	.12	9.25	1.65	7.60	.0008	.0190	.0158	.0032	2.95	.040	.0000	.12	2.60	1.50	370
Yearly avg....	v. sl.	v. sl.	.107	9.80	2.40	7.40	.0000	.0340	.0259	.0081	3.09	.018	.0000	.35	2.25	1.05	20028

?One sample very poor in color—not in avg.

New Shoreham Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of New Shoreham,
Giving the Average for the Years 1900-1902, Grouped for Comparison of the Quality of
the Water at Different Points of the Supply.*

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPO- RATION.			AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c	
		Total.	Loss on Ignition.		Free.	Albuminoid.			As Nitrates.	As Nitrites.					
			Total.	In Solution.		In Suspension.									
New Shoreham, Fresh Pond—															
1900.....	.14	8.70	2.55	6.15	.0075	.0484	.0298	.0186	2.58	.012	.0000	.40	1.20	.65	24760
1901.....	.11	9.60	3.20	6.40	.0139	.0541	.0371	.0170	2.68	.004	.0001	.43	1.45	.70	12454
1902.....	.09	8.65	2.80	5.85	.0113	.0515	.0355	.0160	2.53	.004	.0000	.43	1.30	.60	1587
New Shoreham, Sands Pond—															
1900†.....	.....	13.55	4.35	9.20	.0287	.0556	.0455	.0101	3.62	.016	.0053*	.96	2.49	1.25	2897
1901.....	.24	10.00	2.40	7.60	.0026	.0282	.0222	.0060	3.08	.006	.0000	.35	2.15	.85	13206
1902.....	2.10	9.80	2.40	7.40	.0060	.0340	.0259	.0081	3.09	.018	.0000	.35	2.25	1.05	20028

* All determinations 0 except one.
very poor in color—not in avg.

† One sample very high in all determinations,

? One sample

Averages of Results of Chemical and Bacteriological Examinations of all the Water Supplies in the State, January to December, inclusive, for the year 1902.

(Parts in 100,000.)

	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Pettaconset.....	sl.	sl.	.42	5.05	1.75	3.30	.0022	.0230	.0192	.0038	.39	.012	.0002	62	1.15	.65	6650
Washington.....	v. sl.	v. sl.	.43	3.55	1.40	2.15	.0020	.0170	.0162	.0008	.28	.005	.0002	55	.50	.40	633
Hope.....	"	"	.41	3.55	1.40	2.15	.0011	.0165	.0155	.0010	.25	.006	.0000	56	.55	.40	1235
Laboratory Tap.....	"	sl.	.39	4.80	1.55	3.25	.0013	.0179	.0154	.0025	.41	.013	.0000	51	1.15	.65	615
P. V. Water Co.....	"	v. sl.	.31	3.50	1.25	2.25	.0022	.0165	.0158	.0007	.33	.014	.0000	37	.80	.55	888
Knight's Spring.....	0	0	.00	6.15	2.20	3.95	.0001	.0015	.....	.....	.76	.320	.0000	.00	2.00	.30	571
Coventry Water Co...	0	0	.03	1.95	.65	1.30	.0005	.0068	.....	.....	.30	.004	.0000	.07	.25	.20	2478
East Greenwich.....	0	v. sl.	.30	4.40	1.20	3.20	.0005	.0089	.0081	.0008	.41	.011	.0000	36	1.35	1.05	649
Woonsocket, Res. 3 ..	sl. to dist.	sl.	.56	3.80	2.10	1.70	.0061	.0384	.0277	.0107	.23	.005	.0000	71	.55	.40	1068
" P. Sta.....	sl.	"	.59	4.35	1.75	2.60	.0034	.0252	.0222	.0030	.25	.009	.0000	67	.80	.55	668
" Supts. Office...	"	"	.55	4.00	1.60	2.40	.0020	.0234	.0207	.0027	.25	.009	.0000	63	.90	.55	1283
Pawtucket, Intake....	v. sl.	"	.22	3.95	1.25	2.70	.0021	.0178	.0164	.0014	.32	.010	.0000	33	1.35	.90	496
" Tap.....	"	v. sl.	.22	3.80	1.20	2.60	.0016	.0126	.0120	.0006	.32	.011	.0000	30	1.35	.90	526
Bristol, P. Sta.....	sl.	sl.	.74	10.75	3.60	7.15	.0029	.0349	.0322	.0027	2.82	.008	.0000	1.02	2.30	.85	12052
Bristol Town Clerk's Office.....	"	"	.74	11.20	3.40	7.80	.0021	.0352	.0309	.0043	2.90	.010	.0000	1.01	2.40	.95	9798
Narrag., P. Sta.....	"	"	.75	4.90	1.70	3.20	.0029	.0210	.0191	.0019	.59	.010	.0000	76	.80	.45	1722
Narrag., Office Water Co.....	sl.	v. sl.	.76	4.90	1.80	3.10	.0011	.0187	.0174	.0013	.61	.012	.0000	73	.85	.45	646

* All determinations 0 except one.

Averages of Results of Chemical and Bacteriological Examinations of all the Water Supplies in the State, January to December, inclusive, for the year 1902.—Concluded.

(Parts in 100,000.)

	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Newport, Easton's Pond.....	dist.	dist.	.26	8.55	2.95	5.60	.0045	.0525	.0387	.0138	1.58	.033	.0002	.64	2.60	1.75	1547
Newport, Eng. Cottage.....	sl.	sl.	.24	9.00	2.75	6.25	.0102	.0406	.0344	.0062	1.79	.042	.0001	.56	2.80	1.80	1236
Newport, Office B'd of Health..	"	"	.24	9.70	2.90	6.80	.0054	.0432	.0308	.0124	1.85	.052	.0002	.55	2.95	1.90	1554
Jamestown, No. P. Station.....	v. sl.	v. sl. to sl.	.65	7.70	2.95	4.75	.0037	.0379	.0337	.0042	1.16	.046	.0001	.88	1.90	1.00	4131
Jamestown, So. P. Station.....	0	0 to v. sl.	.02	13.40	3.80	9.60	.0007	.0034	.....	.....	2.95	.396	.0000	.08	4.30	1.25	6578
Jamestown, Wat-son's Store.....	v. sl.	sl.	.52	9.80	3.25	6.55	.0015	.0303	.0263	.0040	1.57	.143	.0000	.70	2.75	1.50	1451
Westerly, P. Sta..	0	0	.00	5.20	.90	4.30	.0002	.0015	.....	.....	.57	.050	.0000	.00	1.95	1.50	33
Westerly Drinking Fountain.....	0	0	.00	5.10	.95	4.15	.0001	.0015	.....	.....	.57	.049	.0000	.00	1.95	1.50	58
East Prov. P. Sta.	sl.	sl.	.50	6.25	1.85	4.40	.0066	.0222	.0191	.0031	.67	.024	.0006	.65	1.90	.85	1925
E. Prov. Mechan-ical Filter.....	0	0	.06	6.00	1.25	4.75	.0059	.0077	.....	.....	.64	.022	.0006	.19	2.20	.10	51
N. Shoreham In'ke	v. sl.	v. sl.	? .10	9.80	2.40	7.40	.0060	.0340	.0259	.0081	3.09	.018	.0000	.35	2.25	1.05	20023

? One sample very poor in color—not included in avg.

EXAMINATION OF SEWAGE WASTES.

One of the most difficult problems which is presented for solution to boards of health is the disposal of sewage wastes. Few inland towns are so situated as to be able to discharge their crude sewage into a nearby waterway. It must be treated and purified before final disposal, or a nuisance will rapidly be created which will demand summary treatment.

A very good understanding of this subject has been established in England, and the various commissions and controlling boards are prepared to recommend methods for disposal of sewage wastes for any given town.

It so happens that the sewages of no two towns are of the same character. The size of the town, the character of the population, the introduction of manufacturers' wastes, and the presence of an ample water supply will each modify materially the density and quality of the sewage. Even the conditions of a water service which is sold by meter will cause a considerable difference in the character of the sewage.

The State of Massachusetts has for many years made a study of these variable quantities, and has published yearly most valuable data.

With the same end in view this Board has, with its increased facilities for chemical analyses, undertaken to consider the stable and the varying conditions attending the disposal of the sewage wastes of those cities in the State which have made an effort to purify their sewage before final disposal. These cities are Pawtucket, Woonsocket, and Central Falls.

All of these cities, realizing that to dispose of their crude sewage by delivering it untreated into the streams near them would sooner

or later call for censure, made provision to meet the existing conditions.

The city of Pawtucket, in 1894, established a filtration system for the treatment of sewage from a certain section.

The system includes the reception of the sewage, for a period of from eight to twelve hours, in tanks 100 feet long, 30 feet wide, and 3 feet deep. Being held in one of the two tanks for such time as is required for it to flow through from one end to the other, a certain amount of sedimentation takes place, and the supernatant fluid flows over into the second tank. From this latter, at certain intervals, the fluid sewage is discharged upon sand beds, which after a certain period of rest are again dosed, or treated with another flowage.

With this experiment, the city engineer of Pawtucket, Mr. George A. Carpenter, has undertaken a series of comprehensive tests to determine the most advantageous means of treating the sewage of his city. Accordingly, in conjunction with the facilities offered by the laboratories of the board, a test was made of the efficiency of the different filters under varying conditions, different forms of filtering media were utilized, and the so-called "septic" treatment was given an extended trial.

The conditions of these various tests during the year will be found under the report of the city engineer of Pawtucket, on pages 31 to 37, inclusive. These results, also, are given in the following tables.

The plant operated by the city engineer, Mr. George A. Carpenter, with an interest and engineering accuracy of observation, has permitted the laboratory of the Board to assist in presenting much practical data for the instruction of plants of cities and towns of small size.

In continuation of the methods of purification and disposal of the sewage of Pawtucket, explained in the previous report, one of the two tanks continued in use as a septic tank during the winter months, November, 1901, to May, 1902.

The value of this process in treating this particular sewage has

been fairly satisfactory. The difficulty which arises is the too rapid accumulation of sludge, which gradually reduces the capacity and depth of the tank. As the depth of fluid content of the tank is but three feet, the accumulation of even a small layer of sludge rapidly reduces the capacity. If these tanks were seven feet in depth a longer run and longer septic action would be permitted.

The handling of the sludge is the unsatisfactory feature of the process. If it could be pumped or allowed to flow into some open sand pit removed from habitations, no difficulty would be experienced. It is possible to run it onto sand beds, but the long, slow filtration not only keeps the beds out of use but requires considerable labor in cleaning the surface after it has dried out. The most difficult and expensive method, but at times the only way, is to shovel out the sludge bodily. From its semi-solid condition and the weight of the material handled, the process is a laborious one. The sludge so removed must be composted in order to avoid the formation of a nuisance.

During the summer months, from May, 1902, through November, 1902, the two tanks were used as settling tanks merely. The sewage was allowed to flow into one tank until it was full. The second tank was then allowed to fill, at the end of which time the first tank would be drawn off onto the filter beds. This form of treatment had been in use for five years and nine months, off and on.

Detailed results of the working of the septic tanks may be found in the report of 1901, page 26.

The use of experimental tank filters by intermittent filtration through coarse material was continued. Coarse stone, chestnut size, filters of soft coal cinders and one of coke, were used. These filters were made of galvanized iron, twenty inches in diameter and six feet in height. The results of the working of these filters will be found in the previous report, and in this report on pages 36 and 37.

The need for an increased area of filtering fields has been realized and an appropriation provided to meet these conditions.

At Central Falls two tanks are provided for the reception and treatment of sewage, with accompanying sand filter beds.

The septic process was used with one of the two tanks.

As will be noted by the analyses in the succeeding tables, the actual septic action on the sewage treated was at times very slight owing to the fact that the septic tank having become filled with sludge at both bottom and floating on the surface, all sewage passing through the tank went through in a continuous narrow stream which forced its way through the accumulated sludge. The results, therefore, have little value as indicating septic processes, but do show the results of failure to clean out the sludge as soon as the tank is completely filled with solids.

To obtain the best results the sewage should be exposed to the septic conditions for a period varying from eight to twenty hours, in order that the anærobic bacteria may have sufficient time to act upon the organic matter present. In other words, a sewage entering at one end of the tank should take at least eight hours before being discharged into the dosing tank.

When the sludge was finally drawn off onto sludge filter beds it made a semi fluid mass nearly a foot deep. Some of the fluid contents filtered through the sand, but the beds soon became choked, and it was necessary to utilize a shovel so thick was the dried layer.

The method of disposal of the sewage from the city of Woonsocket is to receive the flow in a sedimentation gallery or dosing tank from which it goes onto the several beds prepared for that purpose.

Comparison of the different sewages as received for treatment shows that the heaviest sewage is supplied by the city of Central Falls, the next heaviest by the city of Pawtucket, and the least concentrated supply comes from the city of Woonsocket.

The city of Providence, having the largest amount of sewage to be disposed of, treats the same by chemical precipitation. The strength of the sewage is about the same as that of the city of Woonsocket.

The sewage is mixed with measured quantities of lime and sulphate of iron while flowing through the main outfall sewer. It then

passes through large deep cement basins while the coagulated sewage and chemicals settles or precipitates. The supernatant liquor is then flowed into other tanks for further sedimentation. The accumulated sediment or sludge is flowed into a sump well, pumped into sludge basins, and further condensed. The sludge thus obtained is forced into presses and the water squeezed through cloth. The somewhat dry cake resulting is carried by means of a small tramway to sand pits and there dumped. The possibility of utilizing this cake in the Warwick sand plains could not be realized, as the chemical composition of the material showed many lacking ingredients for a plant nutrient, and is very slow to dry out.

This is the first full year of the operation of this plant. An abbreviated account of the working of this plant will be found on pages 44 and 45 of this report, but no analyses were made by this Board during this year.

The results shown in the following tables offer an opportunity for study of methods of treatment of sewage which, if utilized, will give improvement in the character and purification of the effluent discharged into streams as compared with the sewage to be handled.

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being taken from the sewage flow as received at the purification plant.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.			As Nitrites.
								Total.	In Solution.	In Suspension.					
Jan. 7.....				88.4	51.6	36.8	7.20	1.27	.70	.57	7.20			15.60	27,900,000
Jan. 23.....				93.2	58.8	34.4	6.80	1.22	.59	.63	6.82			14.50	42,780,000
Monthly avg..				90.8	55.2	35.6	7.00	1.25	.65	.60	7.01			15.05	35,340,000
Feb. 5.....				75.0	49.0	26.0	7.00	1.10	.83	.27	7.36			14.70	27,900,000
Feb. 18.....				104.6	64.6	40.0	9.20	1.89	.75	1.14	8.22			16.10	56,410,000
Monthly avg..				89.8	56.8	33.0	8.10	1.50	.79	.71	7.79			15.40	42,155,000
March 5.....				93.0	62.0	31.0	9.80	1.45	.79	.66	10.76			14.00	30,690,000
March 19.....				33.0	16.0	17.0	1.60	.30	.10	.20	2.38			2.70	7,130,000
Monthly avg..				63.0	39.0	24.0	5.70	.88	.45	.43	6.57			8.35	18,910,000
April 2.....				98.8	64.0	34.8	9.00	1.24	.73	.51	11.22			13.60	77,500,000
April 15.....				93.4	56.2	37.2	8.40	1.58	.76	.82	9.44			12.50	32,470,000
Monthly avg..				96.1	60.1	36.0	8.70	1.41	.75	.66	10.33			13.05	54,985,000

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being taken from the sewage flow as received at the purification plant.—Continued.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.			As Nitrites.
								Total.	In Solution.	In Suspension.					
May 14.....				94.4	58.8	35.6	7.00	1.20	.61	.59	11.60			10.90	15,500,000
May 28.....				78.4	63.4	15.0	6.20	.89	.50	.39	9.24			12.00	22,940,000
Monthly avg..				86.4	61.1	25.3	6.60	1.05	.56	.49	10.42			11.45	19,220,000
June 10-11....				112.6	73.6	39.0	7.00	1.34	.64	.70	15.58			12.70	18,600,000
July 1-2.....				81.8	59.2	22.6	7.00	1.03	.53	.50	10.98			9.30	
July 16-17....				75.6	51.4	24.2	6.00	.83	.58	.25	11.82			8.20	11,900,000
July 29-30....				88.6	47.8	40.8	5.00	.91	.46	.45	9.40			7.40	9,760,000
Monthly avg..				82.0	52.8	29.2	6.00	.92	.52	.40	10.73			8.30	10,830,000
Aug. 5-6.....				77.2	51.4	25.8	5.40	1.15	.48	.67	10.82			8.20	18,600,000
Aug. 25-26....				69.2	53.6	15.6	5.60	1.01	.44	.57	9.86			9.00	18,600,000
Monthly avg..				73.2	52.5	20.7	5.50	1.08	.46	.62	10.34			8.60	18,600,000
Sept. 2-3.....				93.8	63.0	30.8	6.20	1.19	.62	.57	17.90			10.00	14,515,000
Sept. 16-17....				101.0	57.2	43.8	7.00	1.46	.50	.96	12.06			9.90	9,300,000
Sept. 30.....				83.8	52.4	31.4	6.60	.95	.59	.36	9.40			9.10	15,700,000
Monthly avg..				92.9	57.5	35.4	6.60	1.20	.57	.63	13.12			9.67	13,171,667

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being taken from the sewage flow as received at the purification plant.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.				As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
Oct. 14-15.				87.4	59.4	28.0	7.80	1.44	.63	.81	14.76			11.10	13,580,000
Oct. 29-30.				99.0	59.4	39.6	6.20	1.10	.70	.40	10.28			15.40	9,340,000
Monthly avg.				93.2	59.4	33.8	7.00	1.27	.67	.60	12.52			13.25	11,460,000
Nov. 10-11.				80.0	53.6	26.4	8.40	1.06	.57	.49	11.20			10.20	25,430,000
Nov. 25-26.				100.6	61.4	39.2	6.00	1.24	.46	.78	10.04			12.80	4,060,000
Monthly avg.				90.3	57.5	32.8	7.20	1.15	.52	.63	10.62			11.50	14,745,000
Dec. 9-10.				83.0	46.2	36.8	7.20	1.11	.63	.48	8.58			11.00	15,810,000
Dec. 23.				90.4	55.8	34.6	6.40	.99	.53	.46	7.74			15.70	12,210,000
Monthly avg.				86.7	51.0	35.7	6.80	1.05	.58	.47	8.16			13.35	14,010,000
Yearly avg.				87.0	55.6	31.4	6.80	1.16	.59	.57	10.19			11.46	22,442,708

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being taken from the day flow as received at the purification plant.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
May 14.....				108.4	68.6	39.8	8.40	1.32	.76	.56	12.04			12.30	26,600,000
May 28.....				98.2	64.6	33.6	8.20	1.10	.58	.52	9.80			13.00	96,100,000
Monthly avg..				103.3	66.6	36.7	8.30	1.21	.67	.54	10.92			12.65	61,350,000
June 10-11....				120.0	69.6	50.4	9.00	1.33	.64	.69	14.22			12.70	34,100,000
July 1-2				90.8	66.2	24.6	7.00	1.27	.68	.59	10.84			11.60	19,660,000
July 16				111.0	72.4	38.6	8.20	1.51	.64	.87	11.60			13.30	27,280,000
July 28				124.2	70.2	54.0	8.40	1.42	.65	.77	14.60			12.20	9,820,000
Monthly avg..				108.7	69.6	39.1	7.87	1.40	.66	.74	12.35			12.37	18,920,000
Aug. 5.....				106.0	69.2	36.8	8.40	1.25	.69	.56	14.90			11.10	Lost.
Aug. 25-26....				109.2	68.8	40.4	7.60	1.22	.59	.63	12.16			12.10	20,460,000
Monthly avg..				107.6	69.0	38.6	8.00	1.24	.64	.60	13.50			11.60	
Sept. 3.....				119.6	70.4	49.2	7.00	1.35	.64	.71	15.60			11.10	7,240,000
Sept. 16.....				118.4	68.4	50.0	9.00	1.76	.74	1.02	12.20			14.40	15,500,000
Sept. 30.....				101.0	76.8	24.2	10.40	1.24	.75	.49	10.64			12.90	19,220,000
Monthly avg..				113.0	71.9	41.1	8.80	1.45	.71	.74	12.81			12.80	13,986,667

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being taken from the day flow as received at the purification plant.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color	Total.	Solution.	Suspension.	Free.	Albuminoid.				As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
Oct. 14.				123.4	80.0	43.4	10.00	1.74	.83	.91	19.36			17.00	12,560,000
Oct. 29.				144.6	93.2	51.4	7.00	1.51	.69	.82	13.24			17.50	15,500,000
Monthly avg.				134.0	86.6	47.4	8.50	1.63	.76	.87	16.30			17.25	14,030,000
Nov. 11.				131.8	68.2	63.6	9.00	2.05	.87	1.18	10.98			17.00	42,780,000
Nov. 25.				97.2	53.2	44.0	7.20	1.49	.57	.92	8.60			13.20	17,670,000
Monthly avg.				114.5	60.7	53.8	8.10	1.77	.72	1.05	9.79			15.10	30,225,000
Dec. 9.				129.2	65.0	64.2	12.00	1.94	.99	.95	12.82			15.80	16,120,000
Dec. 23.				102.8	64.6	38.2	8.00	1.09	.66	.43	8.60			16.20	18,160,000
Monthly avg.				116.0	64.8	51.2	10.00	1.52	.83	.69	10.71			16.00	17 140,000
Yearly avg.				113.9	70.0	43.9	8.52	1.44	.70	.74	12.49			13.72	24,923,125

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being taken from the night flow as received at the purification plant.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
May 14.....				65.6	43.8	21.8	3.60	.78	.30	.48	10.42			7.00	10,190,000
May 28.....				68.4	52.0	16.4	5.00	.58	.39	.19	7.58			11.00	6,520,000
Monthly avg..				67.0	47.9	19.1	4.30	.68	.35	.33	9.00			9.00	8,355,000
June 10-11....				112.6	68.2	44.4	7.00	1.12	.59	.53	16.42			12.00	27,280,000
July 1-2.....				67.8	52.4	15.4	6.20	.71	.48	.23	11.20			7.30	53,320,000
July 10-17....				61.2	42.0	19.2	5.60	.61	.39	.22	11.98			6.30	7,340,000
July 28-29....				63.4	36.8	26.6	3.00	.51	.32	.19	6.58			5.50	6,750,000
Monthly avg..				64.1	43.7	20.4	4.93	.61	.40	.21	9.92			6.37	22,470,000
Aug. 5-6.....				64.2	48.8	15.4	4.80	.79	.42	.37	8.78			6.80	11,160,000
Aug. 26.....				60.2	46.8	13.4	4.40	.62	.48	.14	8.94			6.70	13,640,000
Monthly avg..				62.2	47.8	14.4	4.60	.71	.45	.26	8.86			6.75	12,400,000
Sept. 2.....				81.0	58.8	22.2	5.00	.81	.51	.30	19.02			7.50	11,940,000
Sept. 16.....				65.2	48.8	16.4	6.00	.70	.35	.35	11.90			6.90	6,630,000
Sept. 30-31....				62.2	43.2	19.0	5.60	.69	.42	.27	8.00			7.10	8,060,000
Monthly avg..				69.5	50.3	19.2	5.53	.73	.43	.30	12.97			7.17	8,876,000

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being taken from the night flow as received at the purification plant.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
Oct. 14-15.				74.2	47.2	27.0	6.20	.81	.60	.21	12.20			9.50	5,530,000
Oct. 29-30.				77.6	51.0	26.6	5.60	.85	.54	.31	9.24			12.80	6,200,000
Monthly avg.				75.9	49.1	26.8	5.90	.83	.57	.26	10.72			11.15	5,865,000
Nov. 10-11.				67.8	46.0	21.8	6.80	.62	.45	.17	9.22			8.60	6,710,000
Nov. 25-26.				72.8	43.6	29.2	6.00	.90	.53	.37	7.80			10.30	11,170,000
Monthly avg.				70.3	44.8	25.5	6.40	.76	.49	.27	8.51			9.45	8,940,000
Dec. 9-10.				68.6	41.4	27.2	6.60	.96	.38	.58	7.62			9.80	11,780,000
Dec. 23.				63.4	47.0	16.4	5.00	.54	.43	.11	6.78			10.90	1,500,000
Monthly avg.				66.0	44.2	21.8	5.80	.75	.41	.34	7.20			10.35	6,640,000
Yearly avg.				70.4	48.1	22.3	5.44	.74	.45	.29	10.22			8.59	12,101,176

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, taken from the septic tank, having been subjected to these conditions for from eight to ten hours.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
Jan. 7-8.....				57.8	42.6	15.2	5.60	.71	.54	.17	7.22			10.50	9,920,000
Jan. 23-24.....				57.6	49.2	8.4	4.80	.59	.48	.11	6.36			10.20	17,830,000
Monthly avg.....				57.7	45.9	11.8	5.20	.65	.51	.14	6.79			10.35	13,875,000
Feb. 5.....				63.8	46.0	17.8	6.20	.88	.64	.24	7.40			11.20	
Feb. 18.....				66.0	50.6	15.4	6.20	.92	.63	.29	8.20			11.00	23,560,000
Monthly avg.....				64.9	48.3	16.6	6.20	.90	.64	.26	7.80			11.10	
March 5-6.....				76.8	66.0	10.8	7.80	.97	.69	.28	10.58			13.0.0	13,640,000
Mar. 20.....				31.6	25.6	6.0	1.90	.26	.22	.04	3.20			2.70	
Monthly avg.....				54.2	45.8	8.4	4.85	.62	.46	.16	6.89			7.85	
April 3.....				54.4	45.6	8.8	8.00	.78	.57	.21	8.16			7.70	19,220,000
April 16.....				60.0	49.8	10.2	8.20	.92	.64	.28	9.78			7.90	22,500,000
Monthly avg.....				57.2	47.7	9.5	8.10	.85	.61	.24	8.97			7.80	20,860,000
Dec. 9.....				63.2	47.2	16.0	7.00	.69	.63	.06	9.08			9.00	13,810,000
Dec. 23.....				56.2	43.6	12.6	4.10	.62	.38	.24	6.00			9.60	1,050,000
Monthly avg.....				59.7	45.4	14.3	5.55	.66	.51	.15	7.54			9.30	7,430,000
Yearly avg.....				58.7	46.6	12.1	5.98	.73	.54	.19	7.60			9.28	15,191,250

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being the supernatant liquor as flowing onto beds after holding sewage in settling tank.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.				As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
May 14.....	53.8	44.2	9.6	8.00	.97	.64	.33	7.56	.....	.....	6.40	16,740,000
May 28.....	70.0	57.2	12.8	6.40	.73	.55	.18	11.24	.....	.....	8.90	23,560,000
Monthly avg..	61.9	50.7	11.2	7.20	.85	.60	.25	9.40	.....	.....	7.65	20,150,000
June 11.....	71.6	58.6	13.0	9.00	.98	.64	.34	12.82	.....	.....	7.30	69,440,000
July 2.....	70.0	62.4	7.6	7.60	.68	.49	.19	12.04	.....	.....	7.00	54,140,000
July 17.....	65.6	53.2	12.4	10.00	.76	.50	.26	7.96	.....	.....	6.10	24,560,000
July 29.....	75.2	59.0	16.2	8.40	.91	.52	.39	10.84	.....	.....	7.60	4,950,000
Monthly avg..	70.3	58.2	12.1	8.67	.78	.50	.28	10.28	.....	.....	6.90	27,833,333
Aug. 5.....	73.8	61.4	12.4	8.40	.93	.53	.40	11.22	.....	.....	7.20	3,640,000
Aug. 26.....	78.8	60.4	18.4	8.20	.84	.52	.32	12.34	.....	.....	8.70	9,200,000
Monthly avg..	76.3	60.9	15.4	8.30	.89	.53	.36	11.78	.....	.....	7.95	6,420,000
Sept. 2.....	83.6	61.2	22.4	7.00	.95	.62	.33	15.96	.....	.....	7.90	7,080,000
Sept. 16.....	82.0	64.0	18.0	8.00	.88	.63	.25	12.02	.....	.....	8.70	25,420,000
Sept. 30.....	75.8	60.8	15.0	9.00	.97	.60	.37	11.00	.....	.....	8.30	13,020,000
Monthly avg..	80.5	62.0	18.5	8.00	.93	.62	.31	12.99	.....	.....	8.30	15,506,667

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being the supernatant liquor as flowing onto beds after holding sewage in settling tank.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
Oct. 14.....				77.6	58.8	18.8	8.20	1.19	.68	.51	11.00			10.20	10,460,000
Oct. 29.....				83.2	61.0	22.2	5.80	.97	.50	.47	9.60			13.20	16,740,000
Monthly avg..				80.4	59.9	20.5	7.00	1.08	.59	.49	10.30			11.70	13,600,000
Nov. 11.....				79.9	61.8	18.1	10.00	1.30	.82	.48	10.58			11.50	16,360,000
Nov. 25-26...				53.0	41.4	11.6	6.00	.79	.55	.24	6.58			7.80	12,000,000
Monthly avg..				66.5	51.6	14.9	8.00	1.05	.69	.36	8.58			9.65	14,180,000
Dec. 9.....				68.0	52.0	16.0	7.20	.90	.63	.27	8.84			10.00	11,510,000
Dec. 23.....				54.6	40.6	14.0	5.60	.68	.42	.26	6.20			8.60	2,340,000
Monthly avg..				61.3	46.3	15.0	6.40	.79	.53	.26	7.52			9.30	6,925,000
Yearly avg.....				71.6	56.4	15.2	7.80	.91	.58	.33	10.46			8.55	11,568,333

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Effluent or Filtered Sewage of the City of Pawtucket, being taken from the effluent pipe from regular sands beds numbered 5-9.

(Parts in 100,000.)

DATE OF COLLECTION	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	Bed No.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			As Nitrates.	As Nitrites.				
								Total.	In Solution.							In Suspension.
Jan. 5.....	dec.	v. sl.	.76	25.9	7.4	18.5	4.00	.1180	.1100	.0080	5.84	.70	.0300	1.54	141,400	6-7
Mar. 6.....	sl.	v. sl.	1.20	26.9	8.3	18.6	4.00	.1160	.1120	.0040	5.28	.51	.0220	2.28	558,000	7-8-9
April 16.....	sl.	sl.	.10	54.5	17.9	36.6	1.20	.0380	.0220	.0160	7.24	3.60	.0120	.53	1,500	5
June 11.....	v. sl.	dec.	.20	61.0	26.7	34.3	1.30	.0640	.0380	.0260	11.40	4.38	.0240	.77	85,000	5
July 1.....	v. sl.	sl.	.26	60.0	22.1	37.9	1.10	.0400	.0400	.0000	10.96	4.66	.0040	.73	33,000	6-7
Aug. 5.....	dec.	dec.	.70	42.6	7.0	35.6	2.40	.1140	.0640	.0500	9.96	1.46	.0840	1.30	53,750	8-9
Aug. 26.....	v. sl.	dec.	.15	47.7	10.0	37.7	2.04	.0740	.0480	.0260	11.16	2.35	.0680	1.13	156,750	7-8-9
Monthly avg.....	sl.	dec.	.43	45.2	8.5	36.7	2.22	.0940	.0560	.0380	10.56	1.91	.0760	1.22	105,250	.....
Sept. 2.....	sl.	dec.	.25	57.0	17.4	39.6	1.60	.1260	.0660	.0600	13.92	3.11	.0600	1.29	2,579,000	5
Sept. 16.....	v. sl.	sl.	.29	53.3	14.3	39.0	1.44	.0560	.0320	.0240	9.92	3.06	.0240	.83	11,500	6-7
Sept. 30.....	sl.	dec.	.45	41.9	12.7	29.2	2.00	.0720	.0580	.0140	9.64	1.57	.0180	1.06	164,500	8-9
Monthly avg.....	sl.	dec.	.33	50.7	14.8	35.9	1.68	.0847	.0520	.0327	11.16	2.58	.0340	1.06	918,333	.....
Oct. 29.....	sl.	dec.	.30 br.	36.8	7.5	29.3	2.20	.0500	.0360	.0140	8.80	2.09	.0200	1.08	6,800	7-8
Nov. 11.....	dec.	sl.	.90	35.8	10.1	25.7	2.80	.1940	.1560	.0380	9.44	1.06	.0440	1.67	500	5
Dec. 23.....	dec.	sl.	.54	27.6	10.1	17.5	2.88	.0960	.0900	.0060	5.10	1.80	.0120	2.78	42,500	6-7
Yearly avg.....	sl.	sl.	.47	43.9	13.2	30.7	2.23	.0891	.0671	.0220	9.13	2.33	.0325	1.31	294,938	.....

Pawtucket Sewage.

Chemical and Bacteriological Examination of the Effluent or Filtered Sewage of the City of Pawtucket, being taken from the effluent pipe from regular sand beds 10 and 11.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.			NITROGEN.			Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.			As Nitrites.
								Total.	In Solution.	In Suspension.					
Jan. 8.....	dec.	v. sl.	br. 1.00	28.1	7.9	20.2	4.40	.2080	.1920	.0160	6.60	0.45	.0300	2.95	617,500
Feb. 18.....	sl.	dist.	br. 1.00	31.1	7.2	23.9	5.20	.1680	.1600	.0080	7.00	0.14	.0160	2.32	539,400
May 28.....	sl.	sl.	.40	48.4	15.2	33.2	1.80	.0500	.0500	.0000	11.80	2.27	.0200	.93	Lost.
July 16.....	sl.	dec.	br.	34.9	9.2	25.7	3.20	.1020	.0900	.0120	8.80	0.19	.1200	1.50	157,500
Oct. 14.....	sl.	sl.	.25	48.4	10.6	37.8	1.60	.0700	.0600	.0100	9.62	3.50	.0200	0.97	102,000
Yearly avg.....	sl.	sl.	.66	38.2	10.0	28.2	3.24	.1196	.1104	.0092	8.76	1.31	.0412	1.73	354,100

Chemical and Bacteriological Examination of the Effluent of Filtered Sewage of the City of Pawtucket, being taken from the effluent pipe from regular sand beds numbered 12 and 13.

Jan. 23.....	sl.	v. sl.	.75	31.0	12.5	18.5	2.36	.1200	.1020	.0180	6.40	1.45	.0880	1.86	1,920,000
March 20.....	sl.	v. sl.	.60	45.7	21.4	24.3	3.24	.0900	.0720	.0180	5.02	3.99	.1500	1.24	150,600
April 3.....	v. sl.	v. sl.	.28	60.8	29.7	31.1	3.24	.0700	.0620	.0080	6.40	5.15	.1300	1.02	11,100
May 14.....	0	sl.	.16	52.4	19.4	33.0	1.20	.0440	.0260	.0180	5.64	4.01	.0320	.81	8,000
July 29.....	dec.	dec.	br. .60	42.3	18.8	23.5	1.80	.1620	.0980	.0640	10.01	1.85	.0440	1.48	503,000
Nov. 25.....	dec.	sl.	br.	41.9	12.1	29.8	3.76	.1760	.1660	.0100	9.06	1.89	.0500	1.74	331,500
Yearly avg.....	sl.	sl.	.48	45.7	19.0	26.7	2.60	.1103	.0877	.0226	7.09	3.06	.0823	1.36	487,367

Pawtucket Sewage.

Chemical and Bacteriological Examination of Effluent obtained from Bed 15, which is a contact bed, made of soft coke cinders, for the purpose of treating the septic sewage.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			As Nitrates.	As Nitrites.			
								Total.	In Solution.	In Suspension.					
Jan. 7.....	gr.	sl.	tr.	35.0	32.6	2.4	2.40	.2520	.2100	.0420	6.80	0.66	.0920	3.56	2,570,000
Jan. 23.....	gr.	sl.	.60	29.6	27.0	2.6	2.80	.2320	.1540	.0780	5.02	0.56	.0360	2.78	125,300
Monthly avg.....	gr.	sl.	.30	32.3	29.8	2.5	2.60	.2420	.1820	.0600	5.91	0.61	.0640	3.17	1,347,650
Feb. 5.....	gr.	sl.	.70	32.8	29.6	3.2	2.40	.2320	.1760	.0560	5.20	0.87	.0640	2.64	2,170,000
Mar. 5.....	dec.	sl.	tr.	45.6	38.8	6.8	2.16	.1720	.1520	.0200	8.40	1.33	.1040	3.20	1,457,000
Mar. 20.....	sl.	v. sl.	.40	20.4	19.4	1.0	0.56	.0700	.0500	.0200	2.76	0.70	.0120	.76	365,800
Monthly avg.....	dist.	sl.	.20	33.0	29.1	3.9	1.36	.1210	.1010	.0200	5.58	1.02	.0580	1.98	911,400
April 3.....	gr.	sl.	tr.	40.0	35.0	5.0	2.60	.2120	.1720	.0400	7.64	.07	.0640	2.70	8,091,000
Yearly avg.....	gr.	sl.	.28	33.9	30.4	3.5	2.15	.1950	.1523	.0427	5.97	.70	.0620	2.61	2,463,017

Pawtucket Sewage.

• *Chemical and Bacteriological Examination of Effluent obtained from Bed 17, which is a small contact bed, made of cinders, for the purpose of treating the effluent from Bed 15.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		Oxygen Consumed.
								Total.	In Solution.	In Suspension.					
Jan. 7.....	dec.	sl.	.55	.....	.....	.....	1.10	.1720	.1340	.0380	6.76	1.73	.0340	2.48	1,922,000
Jan. 23.....	dec.	v. sl.	.45	.....	.....	.....	.50	.0880	.0680	.0200	5.54	2.03	.0380	1.08	23,500
Monthly avg.....	dec.	sl.	.50	.....	.....	.....	.80	.1300	.1010	.0290	6.15	1.88	.0360	1.78	972,750
Feb. 5.....	dec.	sl.	.45	.....	.....	.....	.61	.1200	.1020	.0180	5.02	1.90	.0200	1.50	561,100
Feb. 18.....	dec.	sl.	.45	.....	.....	.....	1.12	.1180	.1080	.0100	6.44	1.90	.0400	1.82	121,600
Monthly avg.....	dist.	sl.	.45	.....	.....	.....	.87	.1190	.1050	.0140	5.73	1.90	.0300	1.66	341,350
Mar. 6.....	dec.	dec.	br.	.....	.....	.....	1.08	.1840	.1260	.0580	6.50	1.94	.0400	2.40	421,600
Mar. 20.....	sl.	dec.	.31	.....	.....	.....	.28	.0720	.0460	.0260	4.20	1.16	.0200	1.14	163,000
Monthly avg.....	dist.	dec.	.....	.....	.....	.....	.68	.1280	.0860	.0420	5.35	1.55	.0300	1.77	292,300
April 3.....	dec.	sl.	.70	.....	.....	.....	1.12	.1880	.1540	.0340	7.70	1.51	.0200	2.42	4,061,000
April 16.....	dec.	sl.	br.	.....	.....	.....	1.10	.1960	.1540	.0420	7.32	1.79	.0220	2.18	5,177,000
Monthly avg.....	dec.	sl.	.....	.....	.....	.....	1.11	.1920	.1540	.0380	7.51	1.65	.0210	2.30	4,619,000
Yearly avg.....	dec.	sl.	.49	.....	.....	.....	.86	.1423	.1115	.0308	6.19	1.75	.0293	1.88	1,556,000

Pawtucket Sewage.

Chemical and Bacteriological Examination of Effluent obtained from Bed 18, which is an experimental twenty-inch filter containing five inches of sand and receiving the effluent from Bed 15.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.				As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
Jan. 7.	sl.	v. sl.	.30	.....	.....	.....	1.18	.0520	.0520	.0000	6.98	1.15	.0440	1.08	396,800
Jan. 23.	v. sl.	trace.	.26	.....	.....	.....	1.40	.0540	.0520	.0020	5.68	1.27	.0480	.80	37,600
Monthly avg.	sl.	v. sl.	.28	.....	.....	.....	1.29	.0530	.0520	.0010	6.33	1.21	.0460	.94	217,200
Feb. 5.	v. sl.	v. sl.	.30	.....	.....	.....	1.20	.0560	.0560	.0000	4.72	1.36	.0100	.70	81,300
Feb. 18.	sl.	sl.	.31	.....	.....	.....	1.76	.0740	.0740	.0000	6.58	0.28	.0200	1.05	80,800
Monthly avg.	sl.	sl.	.31	.....	.....	.....	1.48	.0650	.0650	.0000	5.65	.82	.0150	.88	81,050
Mar. 5.	dec.	iron. dec.	.46	.....	.....	.....	1.96	.1060	.0940	.0120	5.64	.78	.0300	2.38	18,900
Mar. 20.	v. sl.	v. sl.	.60	.....	.....	.....	1.96	.0880	.0760	.0120	6.36	.54	.0140	1.08	144,400
Monthly avg.	dist.	dist.	.53	.....	.....	.....	1.96	.0970	.0850	.0120	6.00	.66	.0220	1.73	81,650
April 3.	v. sl.	v. sl.	.45	.....	.....	.....	2.40	.0680	.0580	.0100	7.26	.78	.0080	1.03	59,500
April 16.	sl.	v. sl.	iron .40	.....	.....	.....	2.20	.0920	.0720	.0200	5.78	1.70	.0600	1.00	51,900
Monthly avg.	sl.	v. sl.	.43	.....	.....	.....	2.30	.0800	.0650	.0150	6.52	1.24	.0340	1.02	55,700
Yearly avg.	sl.	sl.	.39	.....	.....	.....	1.76	.0738	.0668	.0070	6.13	.98	.0293	1.14	108,900

Central Falls Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Central Falls, the sample being taken from the sewage flow as received at the purification plant.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.		Chlorine.	As Nitrates.	As Nitrites.			
								Total.	In Solution.				In Suspension.		
1901.															
Dec. 16.				139.8	94.6	45.2	9.00	2.02	1.48	.54	11.38			25.80	11,345,000
1902.															
Jan. 2.				169.6	104.0	65.6	15.80	2.72	1.70	1.02	15.60			24.90	11,005,000
Jan. 16.				187.8	119.6	68.2	16.00	3.85	1.90	1.95	17.16			40.40	15,438,000
Jan. 29.				140.8	113.0	27.8	12.40	2.30	1.54	.76	18.38			25.50	4,940,000
Monthly avg.				166.1	112.2	53.9	14.73	2.96	1.71	1.25	17.05			30.27	10,394,333
Feb. 25.				100.8	78.0	22.8	11.00	2.15	1.40	.75	14.22			12.90	8,900,000
Mar. 13.				150.6	105.2	45.4	12.20	2.75	1.60	1.15	14.74			22.10	18,600,000
Mar. 27.				199.0	121.0	78.0	14.20	3.04	1.96	1.08	19.30			28.00	4,740,000
Monthly avg.				174.8	113.1	61.7	13.10	2.90	1.78	1.12	17.02			25.05	11,670,000
April 9.				93.0	76.6	16.4	10.00	1.58	1.36	.22	17.40			15.60	5,605,000
April 22.				147.6	93.6	54.0	17.00	2.76	1.86	.90	15.82			18.30	14,280,000
Monthly avg.				120.3	85.1	35.2	13.50	2.17	1.61	.56	16.61			16.95	9,942,500

Central Falls Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Central Falls, the sample being taken from the sewage flow as received at the purification plant.—Continued.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
May 5.....				213.4	131.2	82.2	15.80	3.64	2.30	1.34	17.78			29.20	14,260,000
May 22.....				196.0	157.2	38.8	16.60	2.41	1.50	.91	54.60			14.20	21,700,000
Monthly avg..				204.7	144.2	60.5	16.20	3.03	1.90	1.13	36.19			21.60	17,980,000
June 4.....				144.8	102.4	42.4	13.00	1.61	1.16	.45	16.50			15.10	9,940,000
June 17.....				104.8	74.4	30.4	16.00	2.05	1.13	.92	13.04			12.10	19,220,000
Monthly avg..				124.8	88.4	36.4	14.50	1.83	1.15	.68	14.77			13.60	14,580,000
July 3.....				93.8	79.8	14.0	16.20	1.53	1.00	.53	17.98			10.30	16,320,000
July 23.....				79.6	57.4	22.2	9.40	1.20	.91	.29	12.84			8.60	12,090,000
Monthly avg..				86.7	68.6	18.1	12.80	1.37	.96	.41	15.42			9.45	14,205,000
Aug. 6.....				141.8	116.4	25.4	16.40	2.05	1.21	.84	35.64			13.00	3,940,000
Aug. 27.....				89.0	63.4	25.6	16.80	1.20	.70	.50	14.50			10.30	Lost.
Monthly avg..				115.4	89.9	25.5	16.60	1.63	.96	.67	25.07			11.65	
Sept. 9.....				124.6	100.2	24.4	19.60	1.77	1.30	.47	29.20			10.20	11,570,000
Sept. 23.....				105.6	77.2	28.4	22.40	1.86	.88	.98	18.72			11.50	8,010,000
Monthly avg..				115.1	88.7	26.4	21.00	1.82	1.09	.73	23.96			10.85	9,790,000

Central Falls Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Central Falls, the sample being taken from the sewage flow as received at the purification plant.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.					NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
								Total.	In solution.	In Suspension.					
Oct. 6.				55.6	45.0	10.6	13.40	1.05	.85	.20	9.80			7.50	14,605,000
Oct. 20.				111.6	68.2	43.4	16.00	1.90	1.46	.44	13.02			11.20	16,120,000
Monthly avg.				83.6	56.6	27.0	14.70	1.48	1.16	.32	11.41			9.35	15,362,500
Nov. 6.				140.2	72.6	67.6	14.20	1.90	.78	1.12	14.82			13.60	17,360,000
Nov. 19.				133.8	98.8	35.0	9.20	1.65	1.18	.47	14.98			16.30	25,420,000
Monthly avg.				137.0	85.7	51.3	11.70	1.78	.98	.80	14.90			14.95	21,390,000
Dec. 4.				165.4	108.4	57.0	10.80	2.44	1.39	1.05	20.40			23.60	35,650,000
Dec. 18.				156.6	51.6	105.0	3.40	1.31	.53	.78	10.02			19.50	3,110,000
Dec. 31.				119.8	91.4	28.4	11.20	1.81	1.21	.60	14.64			15.60	5,270,000
Monthly avg.				147.3	83.8	63.5	8.47	1.85	1.04	.81	15.01			19.57	14,676,667
Yearly avg.				134.8	92.3	42.5	13.77	2.10	1.32	.78	18.17			17.51	13,569,520

Central Falls Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Central Falls, the sample being taken from the well before entering septic tank.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE			RESIDUE ON EVAPORATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.				As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
Jan. 16.				132.2	98.6	33.6	16.00	2.42	1.87	.55	16.84			20.50	12,010,000
Jan. 29.				181.8	133.6	48.2	14.00	2.60	1.93	.67	28.44			25.50	12,300,000
Monthly avg.				157.0	116.1	40.9	15.00	2.51	1.90	.61	22.64			23.00	12,155,000
Feb. 25.				109.6	66.8	42.8	10.60	1.90	1.47	.43	13.58			13.40	12,505,000
Mar. 13.				150.6	103.2	47.4	12.80	2.50	1.57	.93	14.00			22.60	23,560,000
Mar. 27.				171.2	119.8	51.4	14.40	2.65	1.61	1.04	26.98			23.10	19,840,000
Monthly avg.				160.9	111.5	49.4	13.60	2.58	1.59	.99	20.49			22.85	21,700,000
April 22.				191.8	75.8	116.0	18.00	3.21	1.53	1.68	14.24			21.90	22,940,000
May 22.				157.6	120.2	37.4	16.80	2.45	1.55	.90	34.82			17.20	24,180,000
June 4.				139.2	113.6	25.6	12.00	1.38	1.06	.32	18.50			11.70	9,160,000
June 17.				107.4	83.0	24.4	16.00	2.03	1.45	.58	17.38			11.70	16,120,000
Monthly avg.				123.3	98.3	25.0	14.00	1.71	1.26	.45	17.94			11.70	12,640,000
July 3.				106.6	86.0	20.6	14.00	1.23	.94	.29	25.22			9.50	.....
July 23.				121.4	56.2	65.2	8.40	1.26	.58	.68	14.40			9.30	7,340,000
Monthly avg.				114.0	71.1	42.9	11.20	1.25	.76	.49	19.81			9.40	.....
Aug. 6.				133.2	109.6	23.6	17.20	1.70	1.03	.67	33.04			12.00	Lost.
Aug. 27.				93.8	68.2	25.6	18.00	1.35	.70	.65	14.90			10.70	Lost.
Monthly avg.				113.5	88.9	24.6	17.60	1.53	.87	.66	23.97			11.35	.....

Central Falls Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Central Fall, the sample being taken from well before entering septic tank.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.				As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
Sept. 9.....				111.2	72.0	39.2	16.00	1.59	1.21	.38	17.84			11.40	3,160,000
Sept. 23*.....															7,250,000
Monthly avg.....															5,205,000
Oct. 6.....				23.2	18.4	4.8	3.50	.30	.21	.09	2.84			2.80	3,885,000
Oct. 20.....				150.0	80.2	69.8	18.00	2.30	1.33	.97	14.20			15.20	17,771,000
Monthly avg.....				86.6	49.3	37.3	10.75	1.30	.77	.53	8.52			9.00	10,828,000
Nov. 6.....				62.4	36.0	26.4	6.00	.74	.34	.40	8.82			6.70	8,690,000
Dec. 18.....				177.4	55.6	121.8	4.40	1.15	.61	.54	10.20			19.30	6,045,000
Dec. 31.....				136.0	103.8	32.2	13.00	2.05	1.82	.23	20.16			17.60	4,670,000
Monthly avg.....				156.7	79.7	77.0	8.70	1.60	1.22	.38	15.18			18.45	5,357,500
Yearly avg.....				129.3	84.2	45.1	13.11	1.83	1.20	.63	18.23			14.85	15,383,882

* Chemical analysis lost.

Central Falls Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Central Falls, the sample being taken from the septic tank.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.				As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
1901.															
Dec. 16.....				79.8	69.0	10.8	10.20	.85	.76	.09	16.22			10.80	2,725,000
1902.															
Jan. 2.....				96.0	80.6	15.4	11.80	1.10	.99	.11	16.84			12.20	4,855,000
Jan. 16.....				107.0	91.2	15.8	13.00	1.46	1.17	.29	17.80			14.20	5,435,000
Jan. 29.....				132.4	109.6	22.8	12.20	1.12	.97	.15	29.28			15.00	5,420,000
Monthly avg..				111.8	93.8	18.0	12.33	1.23	1.04	.19	21.31			13.80	5,236,667
Feb. 25.....				91.8	77.8	14.0	9.00	1.01	.80	.21	22.18			7.80	13,855,000
Mar. 13.....				104.4	83.4	21.0	9.40	1.41	.74	.67	18.40			13.80	42,160,000
Mar. 27.....				117.2	102.0	15.2	12.60	1.59	1.30	.29	22.20			14.00	12,355,000
Monthly avg..				110.8	92.7	18.1	11.00	1.50	1.02	.48	20.30			13.90	27,257,500
April 16.....				94.0	84.4	9.6	13.00	1.26	1.17	.09	11.60			14.20	7,785,000
April 22.....				118.4	97.2	21.2	13.20	1.48	1.09	.39	27.78			12.40	5,270,000
Monthly avg..				106.2	90.8	15.4	13.10	1.37	1.03	.24	19.69			13.30	6,527,500
May 5.....				88.8	70.2	18.6	12.60	1.11	.83	.28	18.64			9.90	4,375,000
May 22.....				102.6	88.4	14.2	12.40	.95	.75	.20	20.62			10.70	3,370,000
Monthly avg..				95.7	79.3	16.4	12.50	1.03	.79	.24	19.63			10.30	3,872,000
June 4.....				119.2	105.0	14.2	11.20	1.12	1.03	.09	37.95			9.90	4,400,000
June 17.....				101.0	76.6	24.4	10.80	.81	.58	.23	20.56			8.10	5,260,000
Monthly avg..				110.1	90.8	19.3	11.00	.97	.81	.16	29.25			9.00	4,830,000

Central Falls Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Central Falls, the sample being taken from the septic tank.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.			As Nitrites.
								Total.	In Solution.	In Suspension.					
July 3.....				104.2	90.6	13.6	12.00	.82	.61	.21	24.10			10.20	3,410,000
July 23.....				156.6	123.6	33.0	14.00	1.08	.53	.55	42.90			9.20	1,510,000
Monthly avg..				130.4	107.1	23.3	13.00	.95	.57	.38	33.50			9.70	2,460,000
Aug. 6.....				124.2	104.6	19.6	12.80	.95	.56	.39	30.42			8.60	Lost.
Aug. 27.....				115.2	98.4	16.8	16.00	.64	.58	.06	30.00			8.10	Lost.
Monthly avg..				119.7	101.5	18.2	14.40	.80	.57	.23	30.21			8.35	
Sept. 9.....				109.8	90.8	19.0	13.40	.73	.63	.10	24.56			8.70	1,120,000
Sept. 23.....				151.4	102.8	48.6	14.00	.94	.47	.47	32.00			10.30	8,075,000
Monthly avg..				130.6	96.8	33.8	13.70	.84	.55	.29	28.28			9.50	4,597,000
Oct. 6.....				88.6	69.2	19.4	13.20	.70	.52	.18	19.16			7.80	4,255,000
Oct. 20.....				92.0	71.6	20.4	13.00	.75	.55	.20	23.38			8.20	2,280,000
Monthly avg..				90.3	70.4	19.9	13.10	.73	.54	.19	21.27			8.00	3,267,500
Nov. 6.....				132.4	116.6	15.8	15.00	.72	.64	.08	40.10			7.90	2,835,000
Nov. 19.....				92.6	77.8	14.8	15.00	1.07	.75	.32	16.30			10.80	13,640,000
Monthly avg..				112.5	97.2	15.3	15.00	.90	.70	.20	28.20			9.35	8,237,500
Dec. 4.....				92.4	76.2	16.2	13.80	.83	.56	.27	20.10			8.50	5,920,000
Dec. 18.....				83.2	63.4	19.8	10.20	.98	.75	.23	17.04			8.80	6,450,000
Dec. 31.....				89.4	73.0	16.4	12.60	.69	.53	.16	16.06			10.20	13,020,000
Monthly avg..				88.3	70.9	17.4	12.20	.83	.61	.22	17.73			9.17	8,463,333
Yearly avg....				107.1	88.2	18.9	12.55	1.01	.77	.24	23.70			10.40	7,490,833

Central Falls Sewage.

*Chemical and Bacteriological Examination of the Sewage Effluent of the City of Central Falls,
the sample being taken from beds 1-3.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.				As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
Jan. 2.....	gr.	sl.	br.	52.7	21.5	31.2	5.60	4240	3200	1040	13.74	0.25	.0160	5.36	1,555,000
Jan. 16.....	gr.	sl.	br.	98.2	41.0	57.2	12.00	8600	5920	2680	18.44	0.04	.0000	10.40	3,999,000
Jan. 29.....	gr.	dec.	bl.	86.5	30.7	55.8	9.20	7900	7100	0800	21.18	0.05	.0000	8.60	4,585,000
Monthly avg.....	gr.	dist.	....	79.1	51.1	48.0	8.93	6913	5407	1506	17.79	0.11	.0053	8.12	3,379,667
Feb. 25.....	gr.	sl.	bl.	70.1	18.4	51.7	10.80	4500	4300	0200	20.92	0.38	.0000	5.60	1,767,000
Mar. 27.....	dec.	sl.	br.	55.8	11.7	44.1	6.40	2440	2320	0120	16.78	0.29	.0200	3.44	2,294,000
April 9.....	dec.	sl.	br. 1.00	64.9	13.7	51.2	6.40	2880	2600	0280	20.20	1.31	.1000	3.20	400,000
April 22.....	dec.	sl.	br.	68.5	15.2	53.3	6.48	3120	2840	0280	21.38	0.63	.0400	3.40	165,750
Monthly avg.....	dec.	sl.	....	66.7	14.5	52.2	6.44	3000	2720	0280	20.79	0.97	.0700	3.30	282,875
May 5.....	dec.	sl.	br.	71.0	14.5	56.5	7.04	2880	2680	0200	20.96	0.47	.0600	4.20	202,500
May 22.....	dec.	sl.	br.	91.0	36.8	54.2	5.12	3160	2520	0640	20.22	0.29	.1500	7.64	66,500
Monthly avg.....	dec.	sl.	br.	81.0	25.7	55.3	6.08	3020	2600	0420	20.59	0.38	.1050	5.92	134,500
June 4.....	dec.	dec.	br.	97.0	36.5	60.5	4.40	2440	2280	0160	28.90	1.08	.1500	6.66	92,250
June 17.....	dec.	sl.	br.	71.6	10.7	60.9	6.00	2120	1840	0280	23.74	0.02	.0040	2.50	482,500
Monthly avg.....	dec.	dist.	br.	84.3	23.6	60.7	5.20	2280	2060	0220	26.32	0.56	.0770	4.58	287,375

Central Falls Sewage.

*Chemical and Bacteriological Examination of the Sewage Effluent of the City of Central Falls
the sample being taken from beds 1-3.—Concluded.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.			
								Total.	In Solution.	In Suspension.						
July 23.....	v. sl.	sl.	br.	78.5	11.7	66.8	6.00	.1220	.1160	.0260	27.02	1.38	.2100	1.84	17,500	
Aug. 6.....	sl.	v. sl.		71	75.4	8.1	67.3	5.20	.1280	.0960	.0320	25.84	.76	.0140	1.28	17,000
Sept. 9.....	v. sl.	sl.		47	91.0	15.8	75.2	4.20	.0800	.0780	.0020	27.18	4.11	.0300	.94	8,500
Sept. 23†.....																7,250
Monthly avg.....																7,875
Oct. 6*.....												3.43				40,150
Oct. 20.....	v. sl.	v. sl.		39	75.0	19.5	55.5	3.20	.0590	.0590	.0000	22.60	3.59	.0200	0.79	3,500
Monthly avg.....												3.51				21,825
Nov. 6.....	0	0	20	75.3	22.0	53.3	1.20	.0460	.0460	.0000	16.60	7.04	.0040	.75		21,050
Nov. 19.....	dec.	sl.	br.	68.2	12.8	55.4	5.12	.1860	.1220	.0640	22.28	1.14	.0520	2.66		210,800
Monthly avg.....	sl.	v. sl.		71.8	17.4	54.4	3.16	.1160	.0840	.0320	19.44	4.09	.0280	1.71		115,925
Dec. 4.....	dec.	v. sl.	br.	70.8	13.7	57.1	6.40	.2000	.1060	.0940	24.18	1.33	.2100	2.36		775,000
Dec. 18.....	dec.	sl.	br.	63.4	13.0	50.4	6.00	.2480	.1780	.0700	20.38	0.84	.1500	2.58		620,000
Dec. 31.....	dec.	v. sl.	br.	56.5	11.5	45.0	5.60	.1380	.1360	.0020	16.81	0.67	.0800	2.46		531,500
Monthly avg.....	dec.		br.	63.6	12.8	50.8	6.00	.1953	.1400	.0553	20.47	0.95	.1467	2.46		642,167
Yearly avg.....	dec.	sl.		78.0	20.5	57.5	6.12	.2808	.2339	.0460	21.47	1.39	.0655	3.83		811,898

* Bottle broken. Nitrates and bacteria only. † Bacteria only.

Central Falls Sewage.

*Chemical and Bacteriological Examination of the Sewage Effluent of the City of Central Falls,
the sample being taken from beds 4-5.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.			As Nitrites.
								Total.	In Solution.	In Suspension.					
Jan. 2.....	gr.	sl.	br.	48.0	14.9	33.1	5.32	.5120	.4040	.1080	10.36	0.55	.0160	3.48	547,000
Jan. 16.....	"	"	br.	90.3	31.4	58.9	12.90	.7480	.7160	.0320	20.40	0.04	.0010	8.36	2,077,000
Jan. 29.....	"	"	br.	58.8	15.9	42.9	9.00	.4500	.3800	.0700	16.36	0.12	.0000	4.40	798,500
Monthly avg....	gr.	sl.	br.	65.7	20.7	45.0	9.14	.5700	.5000	.0700	15.71	5.24	.0057	5.41	1,140,833
Mar. 27.....	dec.	sl.	br.	61.3	17.7	43.6	7.20	.2800	.2320	.0480	15.92	0.11	.0020	4.44	601,500
April 9.....	gr.	dist.	bl.	72.8	19.7	53.1	7.60	.3080	.2880	.0200	21.18	0.13	.0070	3.88	247,750
April 22.....	dec.	v. sl.	br.	70.5	23.6	46.9	6.80	.5200	.4720	.0480	16.40	0.46	.0040	5.98	103,750
Monthly avg.....	dec.	sl.	....	71.7	21.7	50.0	7.20	.4140	.3800	.0340	18.79	0.30	.0055	4.93	175,750
May 5.....	dec.	sl.	br.	85.5	25.4	60.1	8.32	.5080	.4800	.0280	19.46	0.22	.0120	5.96	899,000
May 22.....	gr.	dec.	br.	79.2	26.2	53.0	8.16	.3400	.2720	.0680	19.44	0.02	.0100	8.56	391,500
Monthly avg.....	dec.	dist.	br.	82.4	25.8	56.6	8.24	.4240	.3760	.0480	19.45	0.12	.0110	7.26	595,250
June 17.....	dec.	sl.	br.	76.2	13.1	63.1	8.00	.2440	.2160	.0280	23.70	0.09	.0080	2.88	320,000
July 3.....	dec.	sl.	br.	69.5	11.8	57.7	5.68	.1520	.1480	.0040	24.28	0.17	.0160	1.33	55,000
July 23.....	"	"	br.	81.5	10.2	71.3	7.00	.1260	.1120	.0140	29.92	0.34	.0140	2.04	13,500
Monthly avg.....	dec.	sl.	br.	75.5	11.0	64.5	6.34	.1390	.1300	.0090	27.10	0.26	.0150	1.69	34,250
Sept. 23.....	0	v. sl.	52	72.9	15.4	57.5	3.56	.0720	.0720	.0000	23.80	2.69	.0400	1.08	3,000
Oct. 20.....	v sl.	sl.	br.	72.2	10.4	61.8	5.20	.0780	.0750	.0000	25.20	0.51	.0180	1.41	2,000
Nov. 19.....	dec.	sl.	br.	64.5	8.8	55.7	8.00	.2160	.1340	.0820	20.20	0.06	.0060	2.64	438,750
Dec. 4.....	dec.	v. sl.	br.	72.7	10.4	62.3	7.20	.1120	.1060	.0060	26.04	0.76	.0120	2.16	1,023,000
Dec. 18.....	dec.	v. sl.	br.	74.6	17.6	57.0	4.08	.2740	.1780	.0960	20.60	2.80	.0200	1.26	2,000
Dec. 31.....	dec.	v. sl.	br.	49.4	9.4	40.0	5.52	.1120	.1060	.0060	15.02	0.92	.0120	1.48	220,100
Monthly avg.....	dec.	v. sl.	....	65.6	12.5	53.1	5.60	.1660	.1300	.0360	20.55	1.49	.0147	1.63	415,033
Yearly avg.....	dec.	sl.	br.	70.6	16.6	54.0	7.04	.2972	.2585	.0387	20.49	0.59	.0116	3.61	455,491

Central Falls Sewage.

*Chemical and Bacteriological Examination of the Sewage Effluent of the City of Central Falls
the sample being taken from beds 6-7.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITROGEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.			As Nitrites.
								Total.	In Solution.	In Suspension.					
Jan. 16.....	gr.	sl.	br.	84.7	23.7	61.0	11.00	5280	4880	.0400	23.76	0.04	.0000	6.08	1,395,000
Jan. 29.....	"	"	br.	63.8	16.4	47.4	9.00	4700	4200	.0500	16.84	0.06	.0020	4.90	1,643,000
Monthly avg.....	gr.	sl.	br.	74.3	20.1	54.2	10.00	4990	4540	.0450	20.30	0.05	.0010	5.49	1,519,000
Feb. 25.....	gr.	sl.	br.	71.1	20.1	51.0	11.00	5100	4900	.0200	21.00	0.06	.0030	5.20	2,666,000
Mar. 27.....	dec.	sl.	br.	64.7	12.7	52.0	5.76	2400	2120	.0280	15.62	0.09	.0300	3.40	415,000
April 9.....	dec.	sl.	.86	68.6	15.7	52.9	4.48	3800	2760	.1040	24.02	1.42	.2100	3.52	1,030,000
April 22.....				67.3	16.7	50.6	6.60	2920	2480	.0440	20.18	0.41	.0300	3.22	401,000
Monthly avg.....				68.0	16.2	51.8	5.54	3360	2620	.0740	22.10	0.92	.1200	3.37	535,000
May 5.....	dec.	sl.	br.	68.1	18.6	49.5	4.80	4400	3600	.0800	20.98	0.94	.1600	4.76	237,000
May 22.....	dec.	sl.	br.	78.3	16.8	61.5	4.96	4800	4040	.0760	21.20	0.02	.0010	3.96	12,000
Monthly avg.....	dec.	sl.	br.	73.2	17.7	55.5	4.88	4600	3820	.0780	21.09	0.48	.0820	4.36	124,500
June 4.....	v. sl.	dec.	.45	95.0	26.6	68.4	2.80	1000	0800	.0200	24.45	5.65	.0700	1.26	868,000
June 17.....	sl.	sl.	.27	104.5	28.9	75.6	2.84	1200	0920	.0280	21.32	7.87	.0300	1.06	27,600
Monthly avg.....	sl.	dist.	.36	99.8	27.8	72.0	2.82	1100	0860	.0240	22.79	6.76	.0600	1.16	447,800

Central Falls Sewage.

*Chemical and Bacteriological Examination of the Sewage Effluent of the City of Central Falls,
the sample being taken from beds 6-7.—Concluded.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITROGEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.			As Nitrites.
								Total.	In Solution.	In Suspension.					
July 3.	v. sl.	v. sl.	31	103.0	42.0	61.0	2.80	.0580	.0560	.0020	21.80	7.21	.0120	1.00	4,000
July 23.	v. sl.	sl.	31	94.0	21.3	72.7	4.60	.0720	.0620	.0100	25.78	5.68	.0400	1.28	2,500
Monthly avg.	v. sl.	sl.	31	98.5	31.7	66.8	3.70	.0650	.0590	.0060	23.79	6.45	.0260	1.14	3,250
Aug. 6.	v. sl.	v. sl.	35	79.2	14.7	64.5	3.52	.0740	.0620	.0120	23.14	4.73	.0200	0.92	8,500
Sept 9.	0	v. sl.	20	90.1	23.7	66.4	3.20	.0620	.0620	.0000	20.18	5.70	.0220	0.74	68,650
Sept. 23.	0	v. sl.	25	83.4	18.2	65.2	2.64	.0520	.0520	.0000	20.60	5.59	.0400	0.92	1,000
Monthly avg.	0	v. sl.	23	86.8	21.0	65.8	2.92	.0570	.0570	.0000	20.39	5.65	.0310	0.83	34,825
Oct. 6.	0	sl.	21	92.6	18.8	73.8	3.20	.0520	.0500	.0020	22.58	6.22	.0300	0.79	8,700
Oct. 20.	0	trace.	22	88.6	33.6	55.0	3.12	.0480	.0480	.0000	22.04	6.33	.0100	0.75	15,500
Monthly avg.	0	v. sl.	22	90.6	26.2	64.4	3.16	.0500	.0490	.0010	22.31	6.28	.0200	0.77	5,125
Nov. 7.	v. sl.	v. sl.	50	64.2	10.4	53.8	3.20	.0700	.0640	.0060	19.00	3.05	.0300	0.96	11,850
Nov. 19.	dec.	sl.	br.	72.0	22.2	49.8	5.12	.2460	.2220	.0240	20.20	3.76	.2000	2.56	837,000
Monthly avg.	sl.	sl.	....	68.1	16.3	51.8	4.16	.1580	.1430	.0150	19.60	3.41	.1150	1.76	424,425
Dec. 4.	dec.	v. sl.	br.	75.4	10.9	64.5	7.12	.1520	.0980	.0540	26.80	.03	.0000	2.20	4,054,000
Dec. 18.	dec.	sl.	br.	67.6	15.5	52.1	7.20	.3240	.1780	.1460	20.98	.86	.0700	3.94	961,000
Dec. 31.	dec.	v. sl.	br.	56.3	10.6	45.7	8.20	.2800	.2600	.0200	16.78	.06	.0030	3.12	1,333,000
Monthly avg.	dec.	v. sl.	br.	66.4	12.3	54.1	7.51	.2520	.1787	.0733	21.52	.32	.0243	3.09	2,116,000
Yearly avg.	sl.	sl.	....	78.7	19.9	58.8	5.33	.2295	.1947	.0348	21.33	2.99	.0462	2.57	728,650

Central Falls Sewage.

Chemical and Bacteriological Examination of Water taken from stream into which the Effluent of the Central Falls filter beds flow, the sample being taken from the stream at a point two hundred fifty feet below the city line.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
								Total.	In Solution.	In Suspension.					
Jan. 2.....	0	v. sl.	.65	22.6	4.0	18.6	.2800	.0160	.0140	.0020	3.74	.89	.0100	.28	95,500
Feb. 25.....	sl.	dist.	.55	31.1	7.4	23.7	.4000	.0760	.0580	.0180	6.00	1.05	.0100	.98	74,600
Mar. 13.....	sl.	sl.	.95	26.1	6.7	19.4	.2800	.0200	.0180	.0020	3.58	.67	.0200	.56	85,550
April 9.....	sl.	dist.	.66	23.9	6.6	17.3	.3200	.0260	.0220	.0040	3.58	.68	.0040	.40	14,700
May 5.....	v. sl.	sl.	.05	33.1	9.9	23.2	.0600	.0180	.0180	.0000	4.18	.93	.1150	.24	15,100
June 4.....	sl.	dec.	.45	27.5	6.8	20.7	.4200	.0260	.0220	.0040	4.22	.76	.0080	.42	71,700
July 3.....	v. sl.	sl.	.30	29.2	10.1	19.1	.3500	.0160	.0120	.0040	4.42	1.03	.0010	.30	*
Aug. 6.....	v. sl.	sl.	.66	30.4	7.3	23.5	.5100	.0380	.0280	.0100	5.02	2.18	.0240	.52	1,250
Aug. 27.....	sl.	dec.	....	28.0	6.4	21.6	.4000	.0360	.0280	.0080	4.08	.80	.0070	.53	Lost.
Monthly avg.....	sl.	dist.	....	29.2	6.9	22.3	.4550	.0370	.0280	.0090	4.55	1.49	.0155	.53	.....
Sept. 9.....	sl.	dec.	.96	30.3	6.4	23.9	.5100	.0280	.0240	.0040	5.82	.86	.0160	.58	12,276
Oct. 6.....	v. sl.	dec.	.55	25.4	4.2	21.2	.2500	.0520	.0340	.0180	3.20	.36	.0150	1.00	306,250
Nov. 6.....	sl.	dec.	.35	27.9	8.4	19.5	.2500	.0240	.0200	.0040	4.82	.96	.0100	.35	9,500
Dec. 4.....	dec.	sl.	tr.	28.5	6.6	21.9	.6500	.0260	.0200	.0060	5.16	.83	.0140	.51	179,800
Yearly avg.....	sl.	dist.	.56	28.0	7.0	21.0	.4369	.0309	.0245	.0064	4.45	.92	.0111	.51	78,781

* Contaminated.

Woonsocket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Woonsocket, the sample being taken from the flow in the thirty-six inch sewer.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			As Nitrates.	As Nitrites.			
								Total.	In Solution.	In Suspension.					
Jan. 13.....				78.2	47.6	30.6	4.60	1.02	.48	.54	5.90			10.00	4,495,000
Feb. 3.....				69.4	41.8	27.6	4.70	.76	.42	.34	6.18			8.50	20,460,000
Feb. 24.....				127.0	68.0	59.0	5.00	1.21	.56	.65	19.48			12.50	2,170,000
Monthly avg.....				98.2	54.9	43.3	4.85	.99	.49	.50	13.33			10.50	11,315,000
Mar. 10.....				36.6	15.8	20.8	1.40	.32	.16	.16	3.78			4.80	6,830,000
Mar. 24.....				51.2	24.4	26.8	2.80	.61	.31	.30	6.58			6.60	6,265,000
Monthly avg.....				43.9	20.1	23.8	2.10	.47	.24	.23	5.18			5.70	6,547,500
April 7.....				60.0	31.0	29.0	3.50	.55	.33	.22	8.98			7.80	4,045,000
April 21.....				77.9	43.8	34.1	3.90	1.22	.56	.66	9.78			8.00	64,900,000
Monthly avg.....				69.0	37.4	31.6	3.70	.89	.45	.44	9.38			7.90	52,972,500
May 12.....				72.4	40.6	31.8	4.50	.98	.49	.49	7.56			9.70	12,870,000
May 26.....				51.8	21.4	30.4	4.00	.62	.33	.29	9.84			4.30	4,190,000
Monthly avg.....				62.1	31.0	31.1	4.25	.80	.41	.39	8.70			7.00	8,530,000

Woonsocket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Woonsocket, the sample being taken from the flow in the thirty-six inch sewer—Continued.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.			As Nitrites.
								Total.	In Solution.	In Suspension.					
June 16.....				69.0	17.4	51.6	2.75	.47	.28	.19	21.58			3.70	5,790,000
June 30.....				98.8	60.6	38.2	4.60	1.17	.53	.64	7.70			12.40	8,950,000
Monthly avg.....				83.9	39.0	44.9	3.68	.82	.41	.41	14.64			8.05	7,370,000
July 14.....				126.6	56.4	70.2	4.60	1.46	.40	1.06	21.20			12.60	13,060,000
July 28.....				102.8	58.2	44.6	5.90	1.26	.64	.62	13.00			10.20	6,150,000
Monthly avg.....				114.7	57.3	57.4	5.25	1.36	.52	.84	17.10			11.40	9,605,000
Aug. 4.....				96.6	56.4	30.2	4.10	1.11	.54	.57	9.92			10.70	7,110,000
Aug. 25.....				76.4	58.8	37.6	5.00	1.22	.66	.56	8.20			8.90	8,520,000
Monthly avg.....				86.5	57.6	33.9	4.55	1.17	.60	.57	9.06			9.80	7,815,000
Sept. 15.....				88.2	49.0	39.2	6.10	1.33	.54	.79	9.22			8.50	3,840,000
Sept. 29.....				93.6	51.4	42.2	4.20	1.07	.40	.67	9.10			9.20	9,650,000
Monthly avg.....				90.9	50.2	40.7	5.15	1.20	.47	.73	9.16			8.85	6,745,000

Woonsocket Sewage.

Chemical and Bacteriological Examination of the Sewage of the City of Woonsocket, the sample being taken from the flow in the thirty-six inch sewer.—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid			Chlorine.	As Nitrates.			As Nitrites.
								Total.	I nSolution.	In Suspension.					
Oct. 13.....				81.8	46.8	35.0	4.50	1.07	.42	.65	7.36			8.20	12,560,000
Oct. 27.....				97.0	30.4	66.6	3.20	1.07	.45	.62	8.00			13.40	1,190,000
Monthly avg.....				89.4	38.6	50.8	3.85	1.07	.44	.63	7.68			10.80	6,875,000
Nov. 10.....				86.6	52.8	33.8	5.00	1.12	.46	.66	6.20			9.30	7,840,000
Dec. 8.....				75.4	46.2	29.2	5.50	1.12	.58	.54	7.02			10.10	7,835,000
Dec. 22.....				4.00	12.8	27.2	1.20	.32	.13	.19	7.22			4.50	2,220,000
Monthly avg.....				57.7	29.5	28.2	3.35	.72	.36	.36	7.12			7.30	5,027,500
Yearly avg.....				80.3	42.3	38.0	4.14	.96	.44	.52	9.59			8.80	10 042 727

Woonsocket Sewage.

*Chemical and Bacteriological Examination of the Sewage Effluent of the City of Woonsocket,
the sample being taken from beds 1-4, at the purification plant of that city.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	Bed No.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.				As Nitrates.	As Nitrites.			
								Total.	In Solution.	In Suspension.						
Jan. 13.....	v. sl.	v. sl.	.21	21.5	6.3	15.2	.4000	.0520	.0520	.0000	3.96	.82	.0900	.71	73,100	3
Feb. 3.....	v. sl.	0	.14	24.0	8.1	15.9	.7900	.0360	.0360	.0000	4.42	1.51	.0800	.56	15,000	...
Feb. 24.....	v. sl.	0	.13	37.5	11.5	26.0	.6400	.0320	.0320	.0000	5.98	2.43	.1200	.59	46,850	...
Monthly avg...	v. sl.	0	.14	30.8	9.8	21.0	.7150	.0340	.0340	.0000	5.20	1.97	.1000	.58	30,925	...
Mar. 10.....	v. sl.	0	.06	25.7	8.0	17.7	.4600	.0200	.0200	.0000	2.80	1.57	.1500	.60	16,550	2
Mar. 24.....	0	trace.	.06	29.1	13.0	16.1	.1000	.0360	.0360	.0000	3.20	2.19	.0120	.40	37,400	1
Monthly avg...	v. sl.	trace.	.06	27.4	10.5	16.9	.2800	.0280	.0280	.0000	3.00	1.88	.0810	.50	26,975	...
April 7.....	sl.	v. sl.	.15	23.5	6.2	17.3	.6000	.0180	.0480	.0000	5.16	5.21	.0700	.83	63,500	3
April 21.....	0	v. sl.	.06	67.1	33.0	34.1	.0700	.0240	.0240	.0000	5.14	6.59	.0140	.38	27,250	1
Monthly avg...	v. sl.	v. sl.	.11	45.3	19.6	25.7	.3350	.0360	.0360	.0000	5.15	5.90	.0420	.61	45,375	...
May 12.....	v. sl.	0	.09	32.5	10.0	22.5	.1000	.0380	.0380	.0000	5.64	1.98	.0030	.55	80,500	1
May 26.....	0	v. sl.	.03	69.7	24.8	44.9	.1200	.0520	.0520	.0000	5.98	6.24	.0140	.36	1,519,000	4
Monthly avg...	v. sl.	v. sl.	.09	51.1	17.4	33.7	.1100	.0450	.0450	.0000	5.81	4.11	.0085	.46	799,750	...
June 16.....	v. sl.	0	.11	36.5	11.3	25.2	.2100	.0520	.0520	.0000	8.02	1.94	.0040	.55	86,000	3
June 30.....	v. sl.	v. sl.	.19	23.9	5.1	18.8	.4900	.0720	.0720	.0000	7.78	0.44	.0070	.81	204,600	4
Monthly avg...	v. sl.	v. sl.	.15	30.2	8.2	22.0	.3500	.0620	.0620	.0000	7.90	1.19	.0035	.68	145,300	...
July 14.....	v. sl.	0	.10	47.7	9.1	38.6	.0200	.0240	.0240	.0000	9.06	3.08	.0002	.46	20,000	2
July 28.....	sl.	v. sl.	.15	29.9	7.5	22.4	.2000	.0820	.0820	.0000	8.28	.58	.0006	.77	26,400	4
Monthly avg...	v. sl.	v. sl.	.13	38.8	8.3	30.5	.1100	.0530	.0530	.0000	8.67	1.83	.0004	.62	23,200	...

Woonsocket Sewage.

Chemical and Bacteriological Examination of the Sewage Effluent of the City of Woonsocket, the sample being taken from beds 1-4, at the purification plant of that city—Concluded.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.	Bed No.
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.			
								Total.	In Solution.	In Suspension.						
Aug. 4.	sl.	v. sl.	.20	32.0	9.5	22.5	.5400	.0660	.0660	.0000	9.04	.72	.0070	.67	58,400	3
Aug. 25.	sl.	v. sl.	.11	30.6	10.7	19.9	.1100	.0640	.0640	.0000	7.30	1.23	.0020	.78	68,500	4
Monthly avg. . .	sl.	v. sl.	.16	31.3	10.1	21.2	.3250	.0650	.0650	.0000	8.17	.98	.0045	.73	63,450	...
Sept. 15.	0	v. sl.	.07	52.7	20.1	32.6	.0800	.0320	.0320	.0000	5.78	4.40	.0002	.48	20,000	1
Sept. 29.	0	v. sl.	.06	50.1	16.3	33.8	.1020	.0220	.0220	.0000	5.96	3.96	.0010	.40	7,000	2
Monthly avg. . .	0	v. sl.	.07	51.4	18.2	33.2	.0910	.0270	.0270	.0000	5.87	4.18	.0006	.44	13,500	...
Oct. 13.	v. sl.	sl.	.25	19.8	4.5	15.3	.2700	.0700	.0700	.0000	5.90	.48	.0030	.82	67,000	4
Oct. 27.	sl.	v. sl.	.20	20.9	5.5	15.4	.2000	.0720	.0720	.0000	9.12	1.14	.0010	.87	179,800	1
Monthly avg. . .	v. sl.	v. sl.	.23	20.4	5.0	15.4	.2350	.0710	.0710	.0000	7.51	.81	.0020	.85	123,400	...
Nov. 10.	sl.	v. sl.	.15	30.0	9.9	20.1	.2000	.0660	.0660	.0000	5.40	1.58	.0006	.80	150,000	3
Dec. 8.	sl.	v. sl.	.25	23.0	4.4	18.6	.3600	.0520	.0520	.0000	4.98	1.00	.1000	.71	123,250	1
Dec. 22.	v. sl.	v. sl.	.15	22.3	8.7	13.6	.2300	.0240	.0240	.0000	4.04	1.20	.0300	.45	31,500	4
Monthly avg. . .	v. sl.	v. sl.	.20	22.7	6.6	16.1	.2950	.0380	.0380	.0000	4.51	1.10	.0650	.58	77,375	...
Yearly avg. . . .	v. sl.	v. sl.	.13	33.6	11.1	22.5	.2950	.0460	.0460	.0000	6.04	2.28	.0322	.62	70,659	...

Pawtucket Sewage.

Yearly Averages of the Chemical and Bacteriological Examination of the samples obtained from the Sewage Purification Plant at Pawtucket.

(Parts in 100,000.)

	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITROGEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			As Nitrates.	As Nitrites.			
								Total.	In Solution.	In Suspension.					
Sewage.....				87.0	55.6	31.4	6.80	1.16	.59	.57	10.19		11.46	22,442,708	
Sewage day flow.....				113.9	70.0	43.9	8.52	1.44	.70	.74	12.49		13.72	24,923,125	
Sewage night flow....				70.4	48.1	22.3	5.44	.74	.45	.29	10.22		8.59	12,101,176	
Septic.....				58.7	46.6	12.1	5.98	.73	.54	.19	7.60		9.28	15,191,250	
Settled.....				71.6	56.4	15.2	7.80	.91	.58	.33	10.46		8.55	11,568,333	
					Loss on Ignition.	Fixed.									
Beds 5-9.....	sl.	sl.	.47	43.9	13.2	30.7	2.33	.0891	.0671	.0220	9.13	2.33	.0325	1.31	294,938
Beds 10-11.....	sl.	sl.	.66	38.2	10.0	28.2	3.24	.1196	.1104	.0093	8.76	1.31	.0412	1.73	354,100
Beds 12-13.....	sl.	sl.	.48	45.7	19.0	26.7	2.60	.1103	.0877	.0226	7.09	3.06	.0823	1.36	487,367
Bed 15.....	gr.	sl.	.28	33.9	30.4	3.5	2.15	.1950	.1523	.0427	5.97	.70	.0620	2.61	2,163,017
Bed 17.....	dec.	sl.	.49				.86	.1423	.1115	.0308	6.19	1.75	.0293	1.88	1,556,000
Bed 18.....	sl.	sl.	.39				1.76	.0738	.0668	.0070	6.13	.98	.0293	1.14	108,900

Central Falls Sewage.

Yearly Averages of the Chemical and Bacteriological Examinations of the samples obtained from the Sewage Purification Plant at Central Falls.

(Parts in 100,000.)

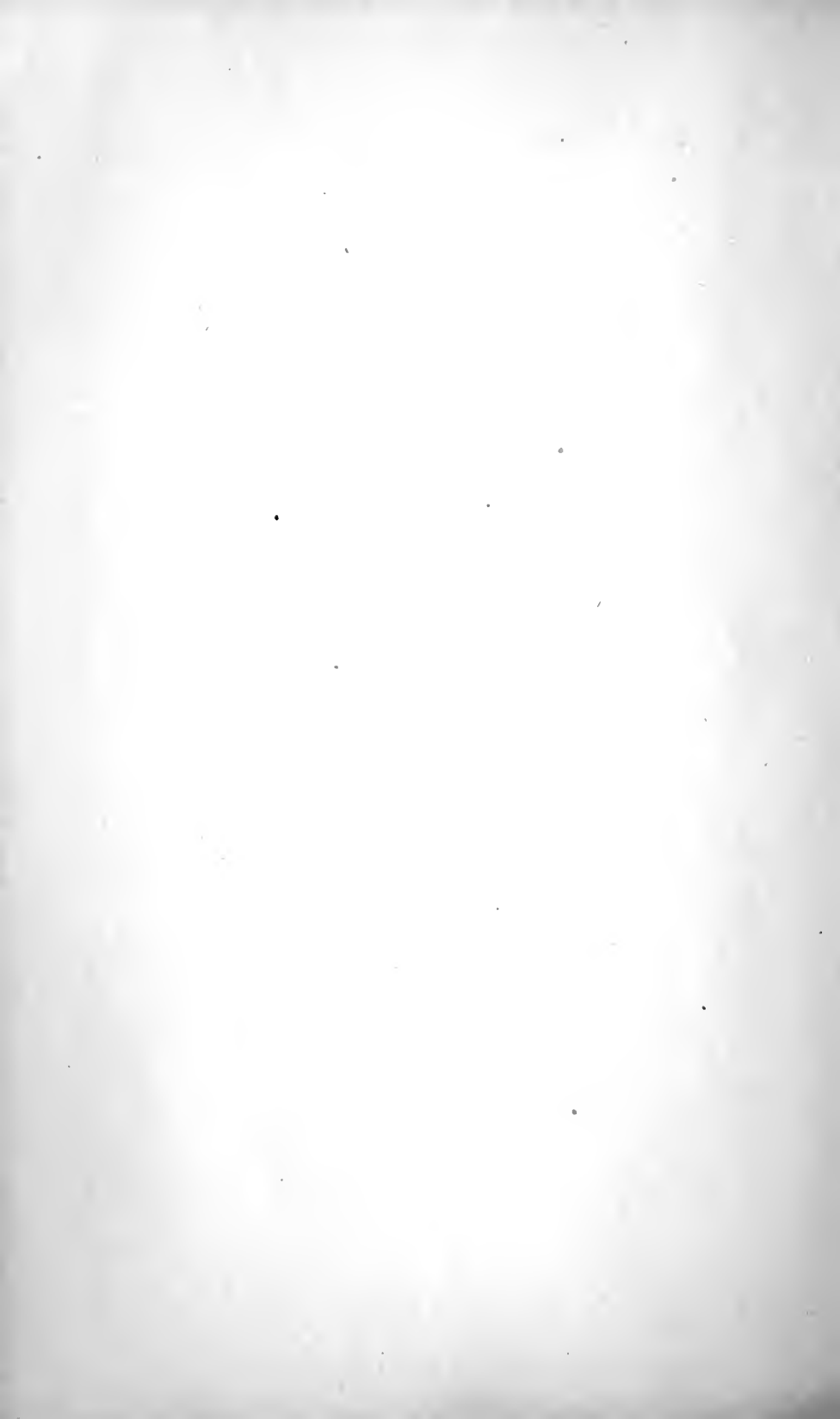
	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid.			As Nitrates.	As Nitrites.			
								Total.	In Solution.						In Suspension.
Sewage.....	.....	.....	.....	134.8	92.3	42.5	13.77	2.10	1.32	.78	18.17	.....	.....	17.51	13,569,520
Sewage from well	.....	.....	.....	129.3	84.2	45.1	13.11	1.83	1.20	.63	18.23	.....	.....	14.85	15,383,882
Septic.....	.....	.....	.....	107.1	88.2	18.9	12.55	1.01	.77	.24	23.70	.....	.....	10.40	7,490,833
Beds 1-2-3.....	dec.	sl.	....	78.0	20.5	57.5	6.12	.2808	.2339	.0469	21.47	1.39	.0655	3.83	811,898
Beds 4-5.....	dec.	sl.	br.	70.6	16.6	54.0	7.04	.2972	.2585	.0387	20.49	.59	.0116	3.61	455,491
Beds 6-7.....	sl.	sl.	....	78.7	19.9	58.8	5.33	.2295	.1947	.0348	21.33	2.99	.0462	2.57	728,650
Stream.....	sl.	dist.	.56	28.0	7.0	21.0	43.69	.0309	.0245	.0064	4.45	.92	.0111	.51	78,781

Woonsocket Sewage.

Yearly Averages of the Chemical and Bacteriological Examinations of the samples obtained from the Sewage Purification Plant at Woonsocket.

(Parts in 100,000.)

	APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.			Chlorine.	NITROGEN.		Oxygen Consumed.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Solution.	Suspension.	Free.	Albuminoid			As Nitrates.	As Nitrites.			
								Total.	In Solution.						In Suspension.
Sewage.....				80.3	42.3	38.0	4.14	.96	.44	.52	9.59			8.80	10,042,727
Beds 1-4.....	v. sl.	v. sl.	.13	33.6	Loss on Ignition. 11.1	Fixed. 22.5	.2950	.0460	.0460	.0000	6.04	2.28	.0322	.62	70,659



METEOROLOGY.

It has been remarked in previous reports of the Board that the influence of the meteorological conditions of the atmosphere, as well as the floating matter suspended therein, are recognized and acknowledged by all pathologists as causes of disease; and the following tables are therefore introduced, as heretofore, for the purpose of comparing the large prevalence of certain diseases, at different monthly periods of the year, with the temperature, the atmospheric pressure, the relative humidity, prevailing direction and force of the wind, and other conditions of the atmosphere, and also the amount of cloud and rain-fall during each month of the year. All of the said diseases and monthly prevalence of the same may be found in the report upon the registration of deaths arranged by MONTHS, in Table VII of the Registration Report.

The first table is compiled from the monthly reports of the city engineer of Providence, and shows the mean, maximum, and minimum temperature of the different months, and the extremes and average daily range of the same; the rain-fall, and prevailing direction of the wind.

The second table will give a more comprehensive monthly summary of observations during 1902, including a large number of atmospheric conditions for each month, and also yearly summaries for each of the twenty-one preceding years.

It is condensed from the annual summary of monthly observations at Hope reservoir and the city hall, in Providence.

TABLE I.—*Temperature, Range of Temperature, Rain-fall, and Prevailing Direction of the Wind for each Month during the Year 1902.*

MONTHS, 1902.	TEMPERATURE.							Total Amount of Rain or Melted Snow in inches.	PREVAILING DIRECTION OF THE WIND.
	Monthly Mean.	Maximum.	Minimum.	Monthly Range.	Greatest Daily Range.	Least Daily Range.	Average Daily Range.		
January.....	27.9	65.0	7.0	58.0	41.0	6.5	14.9	2.06*	N. W.
February.....	28.7	50.5	12.5	38.0	21.0	3.0	12.5	6.97*	N. W.
March.....	43.3	66.5	26.5	40.0	22.5	3.5	13.4	5.71	N. W. & S.
April.....	49.6	74.5	34.5	40.0	28.0	3.0	15.8	3.09	S.
May.....	59.3	91.0	36.5	54.5	31.5	9.0	20.8	1.20	S.
June.....	66.8	92.5	51.0	41.5	30.0	8.5	20.0	4.17	N. W.
July.....	70.2	93.0	55.8	38.0	27.0	4.0	16.7	3.41	S.
August.....	69.5	90.5	52.0	38.5	26.0	9.5	18.2	2.39	N. W.
September.....	63.8	88.0	46.5	41.5	24.5	5.0	15.8	6.55	S.
October.....	55.0	74.0	33.0	41.0	25.5	4.0	15.4	4.57	N.
November.....	47.2	68.0	27.5	40.5	28.0	5.0	15.1	1.80*	N.
December.....	30.6	56.5	-6.0	62.5	33.0	5.5	16.3	6.40*	N. W.
For year.....	51.0	75.8	31.8	44.5	.....	.....	.....	48.32	N. W.

*Snow and rain.

TABLE II.—Summary of Meteorological Observations at Hope Reservoir and City Hall, for the Year 1902.

MONTHS.	BAROMETER, Reduced to Sea Level, and to 32°.				THERMOMETERS.				RELATIVE HUMID- ITY.	WIND.								WEATHER.				RAIN AND SNOW.					
	Mean.	Minimum.	Maximum.	Range.	Mean.	Minimum.	Maximum.	Range.		Prevailing Direction. No. of days it was.								Atmosphere. No. of days it was.				Amount of rain or melted snow in inches.	Depth of snow in inches.				
										North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Variable.	Mean Velocity.	Clear.	Fair.			Variable.	Rain or snow.	All others.	Mean amount of cloud.
January.....	30.00	30.04	29.11	1.53	27.9	65.	7.	58.	7	0	1	2	7	0	2	12	....	9	6	10	2	13	0	4.2	2.06†	5.50	
February.....	29.73	30.22	28.69	1.53	28.7	50.5	12.5	38.	7	4	0	1	1	0	3	12	....	10	7	7	0	11	0	4.6	6.97†	28.50	
March.....	29.89	30.50	29.04	1.46	43.3	66.5	26.5	40.	6	2	1	1	8	4	1	8	....	9	2	11	0	17	1	5.5	5.71†	8.00	
April.....	29.87	30.27	29.19	1.08	49.6	74.5	34.5	40.	66	1	2	1	2	0	5	7	....	9	1	17	1	11	0	5.4	3.09†	*	
May.....	29.95	30.46	29.46	1.00	59.3	91.	36.5	54.5	63	6	2	0	1	11	2	3	6	....	8	2	17	0	12	0	4.7	1.20	....
June.....	29.85	30.49	29.19	1.30	66.8	92.5	51.	41.5	65	1	1	2	10	3	0	12	....	8	2	11	0	17	0	4.6	4.17	....
July.....	29.97	30.29	29.65	.64	70.2	93.	55.	38.	73	2	5	4	0	7	2	5	6	....	6	2	12	0	17	0	6.2	3.41	....
August.....	29.91	30.25	29.56	.69	69.5	90.5	52.	38.5	71	6	2	0	1	8	2	1	11	....	6	1	20	2	8	0	4.3	2.39	....
September.....	30.04	30.39	29.62	.77	63.8	88.	46.5	41.5	78	8	5	2	1	9	3	0	2	....	7	4	5	4	16	1	5.4	6.55	....
October.....	30.01	30.51	29.18	1.33	55.	74.	33.	41.	70	9	1	0	1	8	4	3	5	....	8	7	12	0	12	0	4.4	4.57	....
November.....	30.03	30.46	29.37	1.09	47.2	68.	27.5	40.5	76	12	3	0	0	6	5	1	3	....	7	5	6	3	12	4	5.3	1.80†	*
December.....	30.01	30.69	29.19	1.50	30.6	56.5	—6.	62.5	75	9	0	2	0	2	2	6	10	....	8	6	4	0	21	0	4.8	6.40†	23.50
Means for the year.	29.94	.....	.....	1.16	51.	.....	.....	44.5	71	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	5.0	.....	.....
Totals for the year.	.....	.....	.....	.....	.....	.....	.....	.....	74	27	12	12	89	27	30	94	.....	.....	45	132	12	170	6	.....	.....	48.32	65.50
Extremes.....	.....	30.69	28.69	2.00	.....	.....	.....	99.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* Too small to be measured.

† Rain and Snow.

"Variable" direction of the wind has not been considered since 1901.

YEARLY SUMMARY FOR 1898.

[illegible]

YEARLY SUMMARY FOR 1897.

[illegible]

YEARLY SUMMARY FOR 1896.

	29.39	1.09	50.4	49.	69					9				4 S
Means for the year.														
Totals for the year.						59	22	11	18	31	36	31	73	45.91
Extremes.	30.85	28.87	1.98	98.	107.					47	150	10	152	61.50

YEARLY SUMMARY FOR 1895.

[illegible]

Meteorological Observations for the Whole State for 1902.

MONTHS.	TEMPERATURE (IN DEGREES FAHRENHEIT).						PRECIPITATION (IN INCHES).						SKY.			WIND
	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snow-fall (un- melted).	Number rainy days.	Number clear days.	Number partly cloudy days.	Number cloudy days.	Prevailing direction of the wind.
BLOCK ISLAND.																
January.....	29.0	-2.2	50	27	8	1	28	1.67	-2.58	0.55	3	10	14	7	10	N. W.
February.....	29.4	-2.3	48	2	12	3	18	6.15	+1.71	2.06	16	10	11	9	8	W.
March.....	40.4	+5.8	56	30	26	19	15	6.33	+2.31	2.61	4	13	9	10	12	S. W.
April.....	45.2	+1.2	62	29	32	4	18	3.29	-0.15	1.86	.....	9	6	18	6	S. W.
May.....	52.6	+0.1	66	26	37	10	18	1.04	-1.86	0.32	.....	10	10	15	6	S. W.
June.....	60.8	-1.2	76	4	45	1	19	5.35	+3.37	1.70	.....	14	12	13	5	S. W.
July.....	66.1	-2.2	80	18	54	17	19	2.31	-0.77	0.44	.....	13	10	14	7	S. W.
August.....	66.9	-1.3	80	27	54	14	19	1.42	-1.90	0.73	.....	7	15	14	2	S. W.
September.....	63.6	-0.1	75	8	48	16	18	3.96	+1.04	1.32	.....	16	9	8	13	N. E.
October.....	55.4	+1.6	72	2	38	30	19	4.70	+0.37	1.49	.....	7	13	10	8	N. W.
November.....	48.6	+3.7	63	10	30	29	21	1.77	-2.43	0.82	T.	10	8	12	10	S. W.
December.....	33.3	-2.9	54	22	-1	9	32	7.04	+3.97	1.44	14.5	17	8	11	12	N. W.
Means.....	49.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	45.03	.....	.....	37.5	136	125	141	99	.....
Extremes.....	.....	.....	80	.....	-1	.....	32	.....	.....	2.61	.....	.....	.....	.....	.....	S. W.

BRISTOL. §

January.....	27.9	-0.7	49	22	8	4	29	1.64	-2.75	0.60	4	11	22	2	7	N. W.
February.....	28.7	-0.8	48	27	14	15	19	5.61	+0.97	1.78	22	9	18	3	7	N. W.
March.....	41.3	+0.0	60	22	26	19	20	5.32	+0.89	1.60	8	13	15	8	8	S. W.
April.....	46.8	+1.7	67	28	33	1	21	3.82	+0.53	2.00	T.	8	15	5	10	S. W.
May.....	55.6	0.0	69	18	38	10	20	1.14	-1.08	0.27	.....	10	18	7	6	S. W.
June.....	63.4	-1.4	79	4	52	11	21	3.44	+1.04	0.90	.....	16	19	5	6	S. W.
July.....	67.0	-2.8	78	18	56	2	18	2.14	-0.99	0.46	.....	10	.....	.....	.....	.....
August.....	.....	.....	.....	.....	.....	.....	.....	0.66	-2.02	0.23	.....	7	.....	.....	.....	.....
September.....	63.8	+0.1	76	18	44	16	24	2.23	-1.32	0.70	.....	14	12	9	9	E.
October.....	54.6	+2.3	72	2	33	22	23	4.06	-0.10	1.45	.....	9	17	10	4	S. W.
November.....	46.5	+2.7	62	10	27	29	25	1.58	-2.39	0.75	.....	7	13	7	10	N. E.
December.....	33.6	-3.0	52	22	-5	9	34	6.29	+2.98	1.45	21.5	15	15	8	8	N. W.
Means.....	48.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	37.93	.....	.....	55.5	129	164	64	75	.....
Extremes.....	.....	.....	79	.....	-5	.....	34	.....	.....	2.00	.....	.....	.....	.....	.....	S. W.

KINGSTON. §

January.....	24.8	-2.3	48	27	1	4	30	2.62	-2.93	1.09	6	10	16	8	7	W.
February.....	26.0	-1.0	52	27	5	5	32	6.46	+1.42	1.58	32	7	12	8	8	W.
March.....	40.0	+5.7	64	30	19	7	28	7.29	+1.78	1.81	8	11	9	9	13	W.
April.....	45.7	+0.9	72	122	28	14	33	4.93	+0.70	2.35	T.	9	7	12	11	S. W.
May.....	54.3	-0.7	77	23	31	10	33	1.34	-2.23	0.52	.....	9	15	8	8	W.

Meteorological Observations for the Whole State for 1902.

(CONTINUED.)

MONTHS.	TEMPERATURE (IN DEGREES FAHRENHEIT).						PRECIPITATION (IN INCHES).					SKY.			WIND	
	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snow-fall (un- melted).	Number rainy days.	Number clear days.	Number partly cloudy days.	Number cloudy days.	Prevailing direction of the wind.
KINGSTON.—Concluded.																
June.....	62.6	—1.9	88	3	40	9	30	4.15	+1.52	0.52	.....	11	10	11	9	S. W.
July.....	67.0	—2.2	90	9	48	7	30	3.23	—0.53	0.69	.....	11	8	8	15	W.
August.....	66.8	—1.8	90	4	44	13	32	1.69	—2.41	0.64	.....	7	16	9	6	W.
September.....	61.9	—0.5	83	1	40	15	30	4.05	+0.19	1.00	.....	12	10	6	14	N. E.
October.....	52.0	+1.2	75	2	24	30	30	4.26	—1.25	1.38	.....	8	14	9	8	W.
November.....	44.8	+3.7	70	10	20	29	38	2.12	—2.96	0.94	.....	7	7	11	12	N. E.
December.....	27.2	—4.5	54	22	—12	9	43	8.03	+4.30	1.94	26	10	10	11	10	W.
Means.....	47.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	50.17	.....	.....	72	112	134	110	121	.....
Extremes.....	.....	.....	90	.....	—12	.....	43	.....	.....	2.35	.....	.....	.....	.....	.....	W.

NARRAGANSETT PIER.

January.....	27.0	-1.9	50	27	4	4	46	1.92	-3.09	0.85	5	11	17	6	8	N. W.
February.....	27.8	-1.2	52	27	9	6	24	7.01	+2.44	1.81	24	8	13	5	10	N. E.
March.....	40.4	+6.0	59	30	22	7	21	6.18	+1.60	1.86	6	11	11	8	12	.....
April.....	45.6	+0.9	70	29	29	4	28	3.37	-0.16	1.80	.....	6	14	6	10	S.
May.....	53.9	-1.1	71	8	34	10	26	1.01	-3.24	0.22	.....	10	22	1	8	S. W.
June.....	62.8	-1.6	83	4	43	1	27	3.60	+1.29	1.15	.....	12	19	7	4	N.
July.....	67.4	-2.5	88	9	49	17	39	3.25	-0.07	1.01	.....	14	14	7	10	S. W.
August.....	66.8	-2.1	82	4	41	14	35	1.81	-2.24	0.71	.....	6	21	6	4	W.
September.....	63.2	+0.5	78	8	43	16	30	3.77	+0.51	0.98	.....	13	13	3	14	N. E.
October.....	53.7	+1.5	76	2	26	30	27	4.54	0.00	1.29	.....	8	18	3	10	S. W.
November.....	46.0	+2.9	70	10	22	29	34	1.59	-2.77	0.88	.....	7	14	1	15	S. W.
December.....	29.4	-4.1	54	22	-5	9	59	6.37	+2.85	0.80	26.5	16	12	8	11	W.
Means.....	48.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	44.42	.....	.....	61.5	122	188	61	116	.....
Extremes.....	.....	.....	88	.....	-5	.....	59	.....	.....	1.86	.....	.....	.....	.....	.....	S. W.

MELVILLE.

January.....	27.8	.....	50	27	5	4	36	1.40	.....	0.78	T.	2	19	2	10	W.
February.....	28.5	.....	48	27	11	11	25	3.66	.....	1.44	13	5	19	1	8	N. W.
March.....	41.6	.....	64	30	24	7	27	6.10	.....	1.59	3	7	14	9	8	N. W.
April.....	48.3	.....	72	28	31	4	25	3.71	.....	2.00	.....	7	19	6	5	N. W.
May.....	55.6	.....	74	24	34	10	30	0.98	.....	0.31	.....	7	14	11	6	N. W.

Meteorological Observations for the Whole State for 1902.

(CONCLUDED.)

MONTHS.	TEMPERATURE (IN DEGREES FAHRENHEIT).						PRECIPITATION (IN INCHES).						SKY.			WIND
	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snow-fall (un-melted).	Number rainy days.	Number clear days.	Number partly cloudy days.	Number cloudy days.	Prevailing direction of the wind.
MELVILLE.—Concluded.																
June.....	63.6	.....	87	4	42	9	42	4.18	.....	1.17	.....	12	20	6	4	S. W.
July.....	65.1	.....	88	9	45	†15	40	2.52	.....	0.41	.....	12	12	10	9	S. W.
August.....	64.6	.....	91	4	44	†21	39	1.18	.....	0.40	.....	5	18	11	2	S. W.
September.....	61.4	.....	85	8	37	16	43	4.14	.....	0.80	.....	12	12	8	10	S. W.
October.....	50.9	.....	79	2	27	24	38	4.66	.....	1.52	.....	8	14	8	9	S. W.
November.....	44.2	.....	70	10	25	†19	36	1.24	.....	0.72	.....	5	9	10	11	N. W.
December.....	28.9	.....	55	22	—6	†9	45	6.11	.....	1.55	13.5	14	12	8	11	N. W.
Means.....	48.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	39.88	.....	.....	29.5	96	182	90	93	.....
Extremes.....	.....	.....	91	.....	—6	.....	45	.....	.....	2.00	.....	.....	.....	.....	.....	S. W.

PROVIDENCE. §

January.....	27.8	-0.3	53	27	7	4	28	2.06	-1.99	0.78	6	12	.....	.....	N. W.
February.....	28.8	-0.3	51	27	12	6	22	6.98	+3.14	2.30	28	8	7	14	N. W.
March.....	43.8	+8.7	67	30	26	19	23	5.71	+1.00	1.30	8	13	.....	.....	.....
April.....	50.0	+3.0	75	22	34	4	30	3.09	-0.55	1.62	T.	7	.....	.....	.....
May.....	60.4	+2.2	91	23	36	10	32	1.20	-2.55	0.54	.....	9	.....	.....	.....
June.....	67.8	-0.4	93	3	51	9	30	4.17	+0.97	0.96	.....	9	.....	.....	.....
July.....	71.0	-1.9	93	14	55	7	27	3.41	+0.18	1.00	.....	12	2	12	N.
August.....	70.1	-0.7	91	4	53	17	26	2.39	-1.77	1.03	.....	6	.....	.....	.....
September.....	64.2	+0.4	88	1	46	6	25	6.55	+3.31	2.67	.....	12	.....	.....	.....
October.....	54.4	+2.0	74	2	33	†22	26	4.57	+0.83	2.22	.....	7	.....	.....	N.
November.....	46.8	+4.2	68	15	27	29	29	1.80	-2.39	0.46	T.	7	.....	.....	.....
December.....	30.0	-3.2	57	22	-6	9	33	6.40	+2.57	1.58	23.5	18	.....	.....	.....
Means.....	51.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	48.33	.....	.....	65.5	120	9	19	31
Extremes.....	.....	.....	93	.....	-6	.....	33	.....	.....	2.67	.....	.....	.....	.....	N. W.

AVERAGES, ETC., FOR 1902.

Block Island.....	49.3	.....	80	.....	-1	.....	32	45.03	.....	2.61	37.5	136	125	141	99	N. W.
Bristol.....	48.1	.....	79	.....	-5	.....	34	37.93	.....	2.00	55.5	129	164	64	75	N. W.
Kingston.....	47.8	.....	90	.....	-12	.....	43	50.17	.....	2.35	72.0	112	134	110	121	W.

Meteorological Observations for the Whole State for 1902.

(CONCLUDED.)

MONTHS.	TEMPERATURE (IN DEGREES FAHRENHEIT).						PRECIPITATION (IN INCHES).						SKY.			WIND
	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snow-fall (unmelted).	Number rainy days.	Number clear days.	Number partly cloudy days.	Number cloudy days.	Prevailing direction of the wind.
AVERAGES, ETC., FOR 1902.																
Narragansett Pier.....	48.7	.....	88	.....	-5	.....	59	44.42	.....	1.86	61.5	122	188	61	116	S. W.
Melville.....	48.4	.....	91	.....	-6	.....	45	39.88	.....	2.00	29.5	96	182	90	93	S. W.
Providence.....	51.3	.....	93	.....	-6	.....	33	48.33	..	2.67	65.5	120	9	19	31	N. W.

All records are used in determining State or district means, but State and district departures are determined by comparison of current data of only such stations as have normals.

§Thermometers not supplied by Weather Bureau.

†On other dates also.

T indicates Trace.

BIRTHS, DEATHS, AND MARRIAGES, 1902.

The value of reliable reports in their various bearings, relating to the records of births, marriages, and deaths, and the items of fact connected therewith, showing the vital movements of the population from year to year, has been so frequently presented in the previous reports of this Board as to need no repetition at this time. It is gratifying, however, to be able to state that, with no exception, persons eminent in social and political science everywhere recognize the indispensable information such reports furnish, and that in every civilized country they occupy places of importance in the government reports scarcely second to any other department.

The forty-ninth report on the registry of vital movements in Rhode Island was completed and issued by the end of the year, and will be found appended to this report.

The work of collecting the data for the fiftieth report, the enumerating, classifying, arranging, and collecting in tables for the purpose of presenting the various facts in such detail as to facilitate examination and study, has been in progress during the time of making up this report, and affords some facts which may be presented at this time.

Below will be found some of the general results of the registry of births, marriages, and deaths during 1902.

BIRTHS.			
SEX.		PARENT NATIVITY.	
Males.....	5,776	Native*	4,525
Females.....	5,451	Foreign	6,702

Whole number of births.....		11,227	

*Including all whose fathers were born in the United States, whether the fathers were of foreign parentage or native.

MARRIAGES.

Native born Groom and Bride.....	1,845
Foreign born Groom and Bride.....	1,280
Native Groom and Foreign Bride.....	505
Foreign Groom and Native Bride.....	506
Whole number of marriages.....	4,136
Native Grooms.....	2,350
Foreign Grooms.....	1,786

DEATHS.

SEX.		NATIVITY.	
Males.....	4,042	Native.....	5,607
Females.....	3,913	Foreign.....	2,348
Whole number of deaths.....		7,955	

There was one birth to every 39.9 of the population, or.....25.1 births in every 1,000
 One person married in every 54.1 of the population, or 18.5 persons married in every 1,000
 And one death in every 56.2 of the population, or.....17.8 deaths in every 1,000
 Population for 1902.....447,422

The following Summary will show the rates, per 1,000 of the population, of births, marriages, and deaths for sixteen years.

	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902
Birth-rates.....	24.2	24.2	24.1	24.7	26.5	25.2	26.5	26.6	25.7	27.3	26.8	25.9	25.6	25.9	25.8	25.1
Death-rates.....	19.9	20.4	19.0	20.1	18.6	20.1	19.6	19.5	19.6	19.1	17.6	16.7	17.6	20.6	18.2	17.8
Excess of Birth-rates over Death-rates.....	4.2	3.8	5.1	4.6	7.9	5.1	6.9	7.1	6.1	8.2	9.2	9.2	8.0	5.3	7.6	7.3
Marriage-rates—persons married.....	18.0	18.7	18.4	18.5	18.7	19.1	18.7	17.4	18.2	17.0	15.6	15.8	16.2	18.4	17.6	18.5
Ratio of number of marriages.....	9.0	9.3	9.2	9.3	9.3	9.6	9.4	8.7	9.1	8.5	7.8	7.9	8.1	9.2	8.8	9.3

The following table will present the number, parentage, and proportion to total mortality of deaths from several of the most prominent causes of death, in their order of precedence:

	Whole No. of deaths.	Percentage of deaths. from all causes.	Parentage.		Excess of Foreign over Native.
			Native.	Foreign.	
Tuberculous Diseases.....	934	11.74	283	651	368
Pneumonia.....	715	8.99	279	436	157
Heart Diseases.....	704	8.85	323	381	58
Cholera Infantum.....	611	7.68	199	412	213
Kidney Diseases.....	535	6.73	230	305	75
Apoplexy and Paralysis.....	476	5.98	244	232	—12
Cancer.....	341	4.29	179	162	—17
Accidents.....	317	3.98	121	196	75
Brain Diseases.....	268	3.37	109	159	50
Old Age.....	261	3.28	100	161	61
Bronchitis.....	259	3.26	86	173	87
Diphtheria.....	148	1.86	55	93	38
Enteritis.....	146	1.84	65	81	16
Dysentery.....	121	1.52	38	82	44
Liver Diseases.....	112	1.41	54	58	4
Typhoid Fever.....	91	1.14	29	62	33
Diabetes.....	51	.64	29	22	—7
Influenza.....	37	.47	17	20	3
All causes.....	7,955	100.00	3,247	4,708	1,461

LONGEVITY OF DECEDENTS.

	1902.	1901.	1900.	1899.	1898.	1897.
Average age in years of Male decedents.....	34.32	35.01	31.81	34.04	34.34	33.71
Female "	36.70	38.07	35.58	37.30	36.34	37.06
Total "	35.49	36.51	33.67	35.67	35.31	35.37

There has been a gradual increase during the last forty years in the average length of life of decedents, taking periods of five years each, running from twenty-nine and thirty-two one-hundredths years, at the beginning, to thirty-five and forty-nine one-hundredths years at the ending, in 1902.

RATIOS OF MORTALITY.

As compared with the year 1901, there was little change in 1902 in the proportional mortality of several of the most important diseases occurring in larger or smaller numbers every year.

APOPLEXY AND CEREBRAL HEMORRHAGE.—There were 23 less deaths from apoplexy in 1902 than in 1901, and 30 less than in 1900. The number of deaths, however, from these causes has been steadily increasing for the past thirty-five years.

BRONCHITIS.—The deaths from bronchitis were 27 more than in the previous year. Previous to the last five years there was a steady increase in the proportionate mortality from bronchitis during the last twenty years, which must be attributed to something more than increased skill in differential diagnoses.

CANCER.—The deaths from cancer were 341 in 1902, 306 in 1901, 292 in 1900, 292 in 1899, 279 in 1898, and 254 in 1897. Cancer has increased considerably in its proportion of mortality to whole number of causes of death, during the last twenty-five years, and is probably due to increased facilities in diagnosis.

CHOLERA INFANTUM.—There were 61 deaths from cholera infantum in 1902, as against 401 in 1901. The proportion to whole number of deaths was 7.68 per cent. For the past 35 years it has been about 6.4 per cent.

CONSUMPTION.—There were 934 deaths from tuberculous diseases in 1902. These include 791 from pulmonary tuberculosis, 36 from general tuberculosis, 56 from tuberculous meningitis, 33 from abdominal tuberculosis, 7 from tuberculous laryngitis, and 11 from other forms of tuberculosis.

A decided contrast will be seen in the proportion of the different diseases, by observation of the diagram shown on page 213. Here, considering the condition for 37 years, it will be seen that consumption has exceeded pneumonia more than sixty-two per cent. as a cause.

DIPHTHERIA.—This disease had a mortality of 148 in 1902, which was 29 less than in 1901; 121 of these were in Providence county, 69 being in Providence city. The percentage to the whole number of deaths was 1.86.

FEVER, TYPHOID.—There were but 91 deaths from typhoid fever in 1902, as against 103 deaths from typhoid fever in 1901, and 127 in 1900. Typhoid fever, as a disease and as a cause of death, has gradually lessened in both proportions, as compared with other important diseases, during the last 20 years.

HEART, DISEASES OF.—The deaths from diseases of the heart in 1902 numbered 704, against 685 in 1901. Diseases of this organ have been gradually increasing during the last thirty-seven years. See Table LXXVIII, page 227, Reg. Rep.

INFLUENZA.—The number of deaths reported as from this disease in 1902 was 39, or 109 less than in 1901. During the year 1892 there were 366 deaths from this cause.

KIDNEYS, DISEASES OF.—The number of deaths from diseases of the kidneys in 1902 was 535, the number in 1901 was 505. Diseases of these organs have been gradually assuming large importance as causes of death during the last thirty-seven years. The ratio of mortality for five years, 1896–1900, was nearly six times as large as the ratio for the years 1866–1870. See Table LXXXI, page 236, Reg. Rep.

PNEUMONIA.—The number of deaths caused by pneumonia in 1902 was 715, as against 742 in 1901. See Reg. Rep., Table LXXXVI, page 246.

SCARLET FEVER.—The number of deaths in 1902 was 30, which is 9 more than in 1901. Scarlet fever has largely decreased in epidemic prevalence and proportion of mortality during the last fifteen years, as compared with previous periods of fifteen years each.

SMALLPOX.—There were no deaths from smallpox in 1902.

REPORT OF CONTAGIOUS DISEASES DURING THE YEAR 1902.

For the purpose of ascertaining the comparative prevalence of the more common communicable diseases the health officers of the several towns are requested to report monthly to the State Board of Health all cases of diphtheria, scarlet fever, typhoid fever, measles, and other communicable diseases which may have occurred during the month previous.

The health officers are supplied with return addressed postals for this purpose, and the postals are forwarded to them each month as a reminder.

Many of them report regularly. Others do not report, as they have no record of cases. The physicians in many towns, although aware of the existence of ordinances requiring the reporting of contagious and infectious diseases, do not report the cases occurring in their practice. This is because in the first place they have so few cases that they postpone the report until it is already known to the town people and to the health officer by town rumor. In some cases the physicians object to reporting to a health officer who is not a physician. In several towns the health officer is merely a nuisance inspector and may be engaged in the occupation of a grocer, plumber, or undertaker.

As no result or benefit will accrue from reporting the case under these conditions, it appears useless to the doctor to report. No inspection will be made, no placard placed, no instructions or precautions will be given by the health officer.

In fact, the physician, in the presence of an epidemic, is more apt to report to the secretary of the State Board of Health. If advised

to report to the local health officer, that he may immediately compare these cases with others reported, the question is asked if there is any health officer and who he is.

Some physicians object to having a mechanic or an undertaker calling in connection with his case, as he does not believe that any additional sanitary directions can be given than those which he has already given to the family.

However, as the proportion of cases reported and those neglected are about the same each year, those reported serve as a comparison with the different years.

By observation of the following tables it will be noted that diphtheria prevailed to a less extent during the year 1896. In 1902 there were 564 cases, which was 111 less than the number reported during the previous year, which was 675. The average for the last eight years was 631. This will make the number for 1902 67 less than the average.

In 1902 there were reported 550 cases of scarlet fever, 108 less than in 1901 and 184 less than the average for the past eight years.

Typhoid fever prevailed to the number of 367 cases, which was 74 more than the number reported in the previous year and 19 more than the average for the past eight years.

The prevalence of these diseases during one year more than another does not give the significance that would appear at first sight.

It permits of comparison of the number of cases with other prevailing conditions, such as season, climatic conditions, etc. By such comparison it permits of the deduction that the spread of the disease is dependent upon local conditions or association of individuals; thus the difference in season may be varied only because individuals are more closely brought in contact with each other, as the schools are open during winter months only. In the summer months the individual is prone to travel, and through coming into contact with the dejections of many individuals at country farms and watering

places, through transmission by flies and other insects or by contaminated drinking, become infected with typhoid fever.

All the figures in this connection go to emphasize the fact that prevalence of these diseases means individual and direct contact of the person with the disease in another, sometimes a milder, form, or in the excreta or secretions from an original case.

The deductions made in the report of the superintendent of health of the city of Providence, give a precise study of the influence of these conditions.

DIPHTHERIA FOR 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For Year.
Barrington.....					0								0
Bristol.....	0		0	1	0	0	0	0	0	0	0	1	2
Warren.....	0										0	1	1
Coventry.....	1	0	0	0	1	0	0	0	0	0	2	0	4
East Greenwich.....	0	0	0	0	0	0	0	0	0	1	0	0	1
West Greenwich*.....													
Warwick.....	2	1	0	0	0	0	0	0	0	0	6	2	11
Jamestown.....													
Little Compton.....	0	0	0	0	0		0	0	1		0		1
Middletown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Newport.....	4	1	4	6	1	0	2	5	3	5	12	7	50
New Shoreham.....						0				0	0	0	0
Portsmouth.....	3	0	0	1	0	1	0	0	0	0	0	2	7
Tiverton.....	0	1	1	0	0	0	0	0	0	0	5	4	11
Burrillville.....	0		1						2			3	6
Central Falls.....	1	2	0	0	0	0	1	0	0	1	6	2	13
Cranston.....	0	0	0	0	0	0	0	0	0	0	2	4	6
Cumberland.....	0	0	1	0	2	0	0	1	0	1	2	0	7
East Providence.....	2	0	0								3	1	6
Foster.....	0	0	0	0	0				0	0	0	0	0
Glocester.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston.....	2	1	1	0	0	0	0	0	1	2	1		8
Lincoln.....	1	0	0	0	0	0	0	0	1	0	0		1
North Providence.....	1	1	2	0	1	1	1	0	1	0	1		9
North Smithfield.....	0	2	0	0	0	0	0	0	0	0	0	0	2
Pawtucket.....	5	0	6	4	6	4	2	1	4	6	7	4	49
Providence.....	32	39	34	23	27	13	14	22	33	34	57	30	358
Scituate.....	0	0	0	0	2	0	0	0	0	0	0	0	2
Smithfield.....		0	0	0	0				0	0	0	0	0
Woonsocket.....													
Charlestown.....	0	0	0	0	0	0	0	0	0	0	1	1	2
Exeter*.....													
Hopkinton.....		1	0	0	0	0	0	0	0	0	0	0	1
Narragansett.....	0	0	0	0	0	0	0	0	0	0	0	0	0
North Kingstown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Richmond.....	0	0	0	0	0	0	0	0	0	0	0	0	0
South Kingstown.....	0	0	0	0	0		0	0	0	0	0	0	0
Westerly.....	0	0	0	0	0	0	0	0	0	1	2	3	6
Total.....	53	49	50	35	40	19	20	29	45	50	108	66	564
Total, 1901.....	71	55	81	31	43	61	19	23	23	77	121	69	674
" 1900.....	56	32	29	28	23	30	26	21	30	53	78	100	506
" 1899.....	18	23	22	11	19	25	16	14	23	35	41	51	298
" 1898.....	51	46	31	30	28	19	13	6	12	34	39	31	313
" 1897.....	103	47	67	59	61	48	38	59	77	147	117	70	893
" 1896.....	117	76	74	108	70	49	53	45	69	121	114	126	1,021
" 1895.....	62	33	31	26	50	35	58	52	100	137	227	164	972
" 1894.....	35	17	31	22	41	32	7	10	23	33	32	58	341

* Has no health officer.

SCARLET FEVER FOR 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For Year.
Barrington.....					1								1
Bristol.....	4		1	3	5	0	0	0	3	15	7	12	50
Warren.....	0									0	0	0	0
Coventry.....	0	0	0	0	2	2	0	0	0	0	0	0	4
East Greenwich.....	1	0	0	0	0	0	0	0	0	1	0	0	2
West Greenwich*.....													
Warwick.....	12	2	1	1	0	2	0	1	12	4	1	1	17
Jamestown.....													
Little Compton.....	0	0	0	0	0		0	0	1		0		1
Middletown.....	1	0	0	0	1	0	0	0	0	1	0	0	3
Newport.....	3	7	9	12	26	5	1	1	1	4	3	5	77
New Shoreham.....										0	0	0	0
Portsmouth.....	0	0	0	1	1	0	0	0	0	0	0	0	2
Tiverton.....	0	0	0	5	5	0	0	0	0	0	0	0	10
Burrillville.....	0		1						0			0	1
Central Falls.....	0	4	1	3	2	0	0	1	0	3	5	12	31
Cranston.....	0	1	3	4	0	0	0	0	1	1	0	1	11
Cumberland.....	9	1	3	1	3	0	0	2	0	1	1	0	21
East Providence.....	1	1	3								1	0	6
Foster.....	0	0	0	0	0				0	0	0	0	0
Glocester.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston.....	3	0	0	0	0	0	0	0	0	2	0	4	9
Lincoln.....		0	0	0	0	0	0	0	0	0	1		1
North Providence.....	2	1	3	1	2	2	1	2	0	1	0		15
North Smithfield.....	0	3	3	0	0	0	0	0	0	0	0	0	6
Pawtucket.....	8	3	10	3	3	3	0	6	2	2	4	2	46
Providence.....	30	16	28	28	23	15	8	15	8	8	7	6	192
Scituate.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Smithfield.....		0	0	0	3				0	1	0	0	4
Woonsocket.....													
Charlestown.....	2	2	1	0	0	0	0	0	0	0	0	0	5
Exeter*.....													
Hopkinton.....		1	0	1	0	0	0	0	0	0	0	0	2
Narragansett.....	1	0	0	0	0	0	0	0	0	0	0	0	1
North Kingstown.....	0	0	1	1	0	0	0	0	0	0	0	4	6
Richmond.....	1	0	1	1	0	0	0	0	0	0	0	0	3
South Kingstown.....	0	0	0	0	0		0	0	0	0	0	0	0
Westerly.....	0	0	3	3	2	4	2	2	0	2	2	3	23
Total.....	68	42	72	68	79	33	12	30	18	46	32	50	550
Total, 1901.....	59	48	59	59	52	54	29	26	35	94	76	66	657
" 1900.....	88	55	68	119	54	53	20	20	22	49	76	58	682
" 1899.....	33	46	48	20	43	30	25	23	65	68	91	15	507
" 1898.....	66	57	47	40	58	48	15	25	26	79	66	45	572
" 1897.....	80	47	47	51	34	57	41	35	42	77	53	63	629
" 1896.....	7	97	61	72	48	30	29	28	33	46	92	87	701
" 1895.....	168	132	118	123	69	78	56	47	55	63	87	91	1,087
" 1894.....	133	95	91	70	71	53	33	33	58	77	103	122	939

* Has no health officer.

TYPHOID, FEVER FOR 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For Year.
Barrington.....					0								0
Bristol.....	0		3	1	0	0	0	3	3	1	4	1	16
Warren.....	0									0		0	2
Coventry.....	0	0	0	0	0	0	0	0	0	0	0	0	0
East Greenwich.....	0	0	0	0	0	0	0	0	1	2	0	0	3
West Greenwich*.....													
Warwick.....	0	0	0	0	0	1	3	0	2	2	1	0	9
Jamestown.....													
Little Compton.....	0	0	0	0	0		0	1	0		0		1
Middletown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Newport.....	0	0	1	0	1	4	6	7	15	9	9	13	65
New Shoreham.....						0				0	0	0	0
Portsmouth.....	0	0	1	0	0	0	0	0	0	0	1	0	2
Tiverton.....	0	0	0	1	0	0	0	0	1	1	1	0	4
Burrillville.....	0		0						0			0	0
Central Falls.....	0	0	0	2	0	0		3	3	5	6	2	21
Cranston.....	1	0	0	0	0	0	1	1	4	0	1	1	9
Cumberland.....	0	0	0	0	0	0	0	0	1	0	0	0	1
East Providence.....	1	1	0								3	2	7
Foster.....	0	0	0	0	0				0	0	0	0	0
Glocester.....	2	0	0	0	0	0	0	0	0	0	0	0	2
Johnston.....	1	0	0	0	0	0	0	0	0	0	0	0	1
Lincoln.....		0	0	0	0	0	0	0	2	0	0		2
North Providence.....	1	0	7	1	0	1	2	1	0	1	0		14
North Smithfield.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Pawtucket.....	0	0	1	0	1	4	2	4	3	10	9	1	35
Providence.....	5	3	9	2	11	5	9	15	16	24	28	16	143
Scituate.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Smithfield.....		0	0	0	0				0	0	0	0	0
Woonsocket.....													
Charlestown.....	0	0	0	0	0	0	0	0	0	0	0	1	1
Exeter*.....													
Hopkinton.....		0	0	0	0	0	0	0	0	0	0	3	3
Narragansett.....	0	0	0	0	0	0	0	0	0	0	0	0	0
North Kingstown.....	0	0	0	0	1	1	0	0	0	0	1	0	3
Richmond.....	0	0	0	1	0	0	0	0	0	0	1	0	2
South Kingstown.....	0	0	1	0	1			0	0	5	6	1	14
Westerly.....	0	0	0	1	0	1	2	1	0	0	1	1	7
Total.....	11	4	23	9	15	17	25	36	51	60	74	42	367
Total, 1901.....	19	17	14	14	12	12	8	24	35	48	43	45	291
" 1900.....	12	7	11	6	10	16	9	27	71	171	83	52	475
" 1899.....	7	8	13	5	10	10	24	40	89	50	32	38	326
" 1898.....	20	20	33	18	10	6	8	16	28	39	25	28	251
" 1897.....	18	9	6	8	12	9	6	21	33	39	35	35	230
" 1896.....	33	17	21	14	9	13	19	46	65	31	31	26	325
" 1895.....	104	35	15	18	8	13	30	25	34	40	53	90	471
" 1894.....	61	27	54	23	25	14	13	54	59	70	56	31	492

* Has no health officer.

MEASLES FOR 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For Year.
Barrington.....					0								0
Bristol.....	0		2	0	0	0	1	2	4	0	0	0	9
Warren.....	0									0	0	0	0
Coventry.....	0	0	0	0	0	0	0	0	0	0	0	0	0
East Greenwich.....	0	0	0	0	0	0	0	0	0	0	0	1	1
West Greenwich*.....													
Warwick.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Jamestown.....													
Little Compton.....	1	0	0	0	0		0	0	0		1		2
Middletown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Newport.....	0	0	1	0	0	0	0	0	0	0	0	0	1
New Shoreham.....						0				0	0	0	0
Portsmouth.....	0	3	1	6	0	4	0	0	0	0	1	0	15
Tiverton.....	0	0	0	1	0	0	0	0	1	4	6	18	30
Burrillville.....	0		0						0			0	0
Central Falls.....	77	51	9	0	0	0	0	0	0	0	0	2	139
Cranston.....	0	0	0	0	1	0	0	0	0	1	2	0	4
Cumberland.....	4	0	0	1	0	2	0	0	0	0	0	0	7
East Providence.....	0	0	0								1	0	1
Foster.....	0	0	0	0	0				0	0	0	0	0
Glocester.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston.....	0	0	0	0	0	2	0	0	0	0	0	0	2
Lincoln.....		4	0	0	0	1	0	0	0	0	0		5
North Providence.....	0	1	0	2	1	3	0	0	0	2	1		10
North Smithfield.....	0	1	0	0	0	0	0	0	0	0	0	0	1
Pawtucket.....	9	6	3	2	0	0	0	0	0	0	0	1	21
Providence.....	9	5	4	6	6	1	2	1	2	3	2	4	45
Scituate.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Smithfield.....		0	0	0	0				0	0	0	0	0
Woonsocket.....													
Charlestown.....	0	0	0	0	0	0	0	0	0	0	0	2	2
Exeter*.....													
Hopkinton.....		0	0	0	1	0	0	0	1	60	23	2	87
Narragansett.....	0	0	0	0	0	0	0	0	0	0	0	0	0
North Kingstown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Richmond.....	0	0	0	0	0	0	0	0	2	0	0	0	2
South Kingstown.....	0	1	0	0	0		0	0	5	9	1	0	16
Westerly.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Total.....	100	72	20	18	9	13	3	3	15	79	38	30	400

* Has no health officer.

TUBERCULOSIS.

The examination of specimens of sputum expectorated by persons who are suspected of being afflicted with pulmonary tuberculosis has long been an established and routine method of assistance in making a diagnosis of the presence of that disease.

The Board introduced this means of assistance to physicians in their daily work in 1894.

It is understood by those who utilize the test that the finding of the organisms of tuberculosis is of positive value. Also that the absence of the tubercle bacillus in a specimen of sputum does not signify that the disease tuberculosis is absent.

It can be readily understood that the person affected may have a small lesion, that the sputum discharged may be saliva and not coughed up, that the secretions from the lungs may come from any portion of raw inflamed surface, that the organisms present may be held in a mass of swollen tissue, and do not happen to escape at the time of coughing in this particular specimen.

When a negative result is found the physician sends in a second specimen for examination if from the clinical symptoms he continues to believe that tuberculosis is present.

That the examinations have a necessary place in the work of a board of health is shown first from the fact, that the disease being a communicable one, it is the duty of boards of health to ascertain the presence of all communicable disease and to prevent those who have the disease from communicating it to others.

The average physician is not, and can not be, properly equipped with the paraphernalia to examine a case which may occur in his

practice only occasionally. He has been fully instructed as to the meaning of the presence or absence of the organism. In many of the schools he has received instruction and actual laboratory practice in examining sputum for the organism, but it is impossible for him to carry the staining solutions necessary or to take the time for the examination.

The bacteriological laboratory of the State Board of Health, fully equipped with the necessary paraphernalia and with daily experience in examinations, is in a position to give a prompt report as to the result of an examination.

The examination is usually made within twenty-four hours of receiving the specimen, and is reported to the physician having the case in charge the following day.

A card catalogue record of these results is kept for reference for the department only.

The result of an examination is never given upon the request of any person except the physician sending in the specimen or by some person by him authorized to receive the report.

It is felt that in a measure these reports are protected securely from the curious friend or neighbor.

Likewise a report to the patient himself is refused on the ground that a misinterpretation of the result may follow to the detriment of the patient and danger to the public. If he receives the report that no tubercle bacilli were found, he may assume that the disease is absent and take no further precautions. If he has the report of a positive finding, he may at once assume a line of treatment with quack remedies; he may become despondent and refuse to seek aid of any kind. If he must ascertain the result from the physician whom he has consulted, an opportunity is offered at least to give sound advice in the presence of the disease and in case of a negative result with suspicious clinical symptoms to advise and obtain a second examination of the sputum.

In addition to the card catalogue maintained to record the re-

sults of examination of sputum, a similar catalogue of all the deaths which are the result of tuberculosis is preserved for reference.

The association of T. B.+, or the finding of tubercle bacilli in a specimen of sputum from a certain person, is followed perhaps in a few months or a year by the record of his death on a blue card.

The deaths have been thus recorded since 1894, and are a source of study to those interested in the subject.

Many cases will occur in sequence in the same family, frequently at the same address. Often several cases will occur in subsequent months or years at the same residence address, but with different names and different families. This permits of study as to whether the premises may be considered as infected, or whether the unsanitary surroundings of lack of fresh air and sunlight may be the causative factor, or whether the persons who are in reduced circumstances, lacking the necessities of life, may not have acquired the disease abroad and that these certain tenements may be the only refuge they may have.

It requires much patient investigation of many years' records and personal consideration of the cases to admit of satisfactory deductions, but a record of this kind will after several years be of service as a basis for such investigations.

Examinations of Sputum for Tuberculosis from January 1, 1902, to January 1, 1903.

CLINICAL DIAGNOSIS.	Total.	Tubercle Bacilli present.	Tubercle Bacilli absent.	Past cases in family.	Present cases in family.
Bronchitis.....	93	15	78	19	2
Bronchitis, chronic.....	28	6	22	22	.....
Tuberculosis, pulmonary.....	390	220	170	66	2
No diagnosis given, susp. tuberculosis.	45	10	35	2	.....
Tubercular laryngitis.....	15	6	9	.....	.....
Tubercular enteritis.....	1	.....	1	1	.....
Pleurisy, tubercular.....	2	2	.....	.....	.....
Pleurisy.....	8	3	5	.....	.....
Pneumonia (after).....	11	3	8	5	.....
Asthma.....	5	.....	5	.....	.....
Abscess of lung.....	4	2	2	.....	.....
"Cough".....	6	2	4	.....	.....
Pharyngitis.....	5	.....	5	4	.....
Chlorosis.....	1	.....	1	.....	.....
Typhoid fever.....	2	.....	2	.....	.....
Grippe.....	2	.....	2	.....	.....
"Catarrh".....	1	.....	1	.....	.....
Laryngitis.....	1	.....	1	.....	.....
"Exposure to naphtha gas".....	1	.....	1	.....	.....
Stricture, esophagus.....	1	.....	1	.....	.....
"Hemorrhage".....	1	.....	1	1	.....
Total.....	623	269	354	101	4

Besides these there were two examinations of fecal matter made, result negative; one examination of pus from mastoid abscess, result positive; one examination of scraping of fistula, result negative.

During the year there were 623 specimens of sputum submitted for examination, with the supposition on the part of the attending physician that tuberculosis might be a factor in the causation of the symptoms of the patient.

Of these cases, in 390 the clinical symptoms present were sufficiently distinctive to lead the physicians to believe that tuberculosis of

the *lungs* was present. In 220 of these cases the examination of the specimen of sputum showed the presence, in greater or lesser quantity, of tubercle bacilli. This would make 56 per cent. of cases where the clinical diagnosis coincided with the bacterial findings, while in 170 cases, or in 44 per cent., the bacilli of this disease were not found. While this negative result is of value, yet it does not carry the weight of a distinct negative, as to the actual presence of the disease, for it is possible to obtain from the patient a specimen of sputum which is composed of only the saliva and secretions from the larynx, and containing none from the air passages in the lungs. The organisms may also be present at times, in the lung, either lying dormant or encapsulated, and will not be discharged into the air passages, and become a part of the sputum, until a degenerative process is set up which breaks down the tissues about the organisms and sets them free.

In the 15 cases of tubercular laryngitis 6 were positive. The 2 cases of tubercular pleurisy were positive. The application of this method of diagnosis is especially valuable in this form of the disease, inasmuch as the appearance of the larynx may indicate the presence of ulcerative processes, and the formation of tubercles from other causes.

It is of especial value in these cases, for the organism may not as yet have invaded the lung, but if the cases are neglected, they may readily be carried to the lung or intestine, and there propagate the disease.

It is of interest to note that, of 121 cases of chronic and acute bronchitis, in 21 cases the diagnosis was erroneous, and the presence of tuberculosis was established in the bronchi, if not, also, in the lungs. The constitution of the patient, however, being sufficiently strong, as yet, to prevent the invasion of the organisms into large areas, the symptoms present were not sufficiently distinct, or alarming, to warn the physician of the dangerous element which was present. In 43 instances, where the diagnosis of bronchitis was made, there had been other cases of the disease in the family.

RECORDS OF ALL CASES OF DEATH BY CONSUMPTION IN THE STATE.

As a part of the investigation of the subject of tuberculosis in man, a card catalogue record of all deaths from pulmonary tuberculosis has been arranged. At present this data is available from the commencement of the year 1890, and is completed to date. This division of the work affords much interesting material for study. The number of deaths for the different years was as follows:

Deaths in 1890.....	911
“ “ 1891.....	814
“ “ 1892.....	848
“ “ 1893.....	812
“ “ 1894.....	825
“ “ 1895.....	839
“ “ 1896.....	846
“ “ 1897.....	777
“ “ 1898.....	886
“ “ 1899.....	972
“ “ 1900.....	987
“ “ 1901.....	990
“ “ 1902.....	934
<hr/>	
Total.....	11,441

These 11,441 cases are recorded on cards with the following data: Name, address, age, color, married, single, or widow, name before marriage, and date of death. By collecting the names in this way

it is observed that certain names recur at varying periods of time, and by looking up the individual case further it will be found that this death has occurred in a family where previous deaths from consumption have taken place, the address in many cases being the same.

In many instances there were two cases occurring in the same family; in other instances, three and four cases.

Should the records go back for more years, a larger number would be discovered.

In addition to the card catalogue of the names of the decedents, a separate card catalogue of the *premises* where the death occurred has been kept, and thus it is possible to ascertain when any particular house may have, by chance, been infected with this disease. It is further possible to ascertain if more than one case has occurred in any one house.

EXAMINATION OF CULTURES IN CASES OF SUSPECTED DIPHThERIA.

The examination of cultures from material swabbed from the throats of persons suspected of having diphtheria has been continued.

This practice was inaugurated in 1894, and Rhode Island was the first State to place this facility before the profession, following by a month or two its introduction by the city of New York.

This procedure enables the physician to verify his suspicion of the presence of diphtheria in the throat of his patient by showing the positive presence of the Klebs Loëffler bacillus, or, on the other hand, by the absence of that organism confirms his diagnosis of pharyngitis or tonsilitis.

In many instances a positive finding in the presence of clinical symptoms which are negative of diphtheria has enabled the physician to foresee and forestall by treatment the actual presence of diphtheria. The clinical symptoms may not have developed sufficiently to be diagnostic, and yet the presence of the characteristic bacillus enables the physician to be on his guard against any sudden depressing symptoms of the patient. It also places him on his guard against the spread of the disease to other members of the family. These persons may be more susceptible to the toxic influences of the organism than the patient, and may have the disease in a more virulent form.

By thus being forewarned the physician is prepared to meet the serious symptoms of the disease and to neutralize the action of the organism, or rather its toxic products, by the administration of anti-

diphtheritic toxin or diphtheria antitoxin. This product has been supplied by the State Health Department free, to those unable to pay for it, since its introduction to the profession.

The State was early in its belief that the protection of the individual case of a communicable disease against other members of the community was justifiable. In thus utilizing the State's money it was believed that the public was protecting itself against the spread of the disease by checking it in the individual.

If the individual having the disease was unable to protect himself against others, it was proper that the State protect its taxpayers as it would in the isolation and sustenance of cases of small-pox.

As the State as a whole is protected in this way, the State assumes the expense of the protection.

While the expense of examination of the cultures from the throats examined and the expense of antitoxin is seemingly considerable, yet the protection afforded is far above the expenditure.

During the year 1902 there were 1,143 cultures examined for the presence of diphtheria. Of this number the Klebs Loëffler bacillus of diphtheria was found in 308 cases, 173 of these showing a pure, unmixed culture of Klebs Loëffler, and 135 a mixture with micrococci. The bacilli were absent in 869 cases.

The membrane in the suspected cases was located in the tonsils in 568 cases, on the pharynx in 26 cases. There were other cases already in the same family in 265 cases.

The duration of the disease before the disappearance of the bacilli from the culture is shown in the table.

In the 3 cases where it remained for one day only, it may be explained that although there may have been an error in the microscopic examination, yet it is possible that the second culture may have been from the secretions on the tongue and not from the back of the throat.

In one case a culture was taken and found to be positive on October 15th, and a negative culture was not obtained until after December 31st, a period of 78 days.

The patient usually recovers his strength and the symptoms of the disease may subside in a few days, and yet the bacillus of diphtheria remain growing in the throat. The patient having had the disease has become immune against the toxin produced by the bacilli. These bacilli, although attenuated, may last for a long time in the throat. If they are transferred to the throat of another person whose system is non-resistant against the invasion or growth of this organism, as with all other pathogenic organisms, they may take on renewed strength and become of a virulent character in the second throat.

DIPHTHERIA.

CLINICAL DIAGNOSIS.	RESULTS.										LOCATION.						DURATION.							
	Total number primary cultures examined.	K. L. present.	K. L. pure.	K. L. Mle.	Total number K. L. absent.	Mle.	Mle. and strep.	Mle. and strep. bacilli.	Mle. bacilli.	Bacilli.	Contamination.	No growth.	Tonsils.	Pharynx.	Tonsils and pharynx.	Other parts of throat.	None seen.	None given.	Other cases in same family.	One day.	Few days.	One week.	Weeks.	One month or more.
Tonsillitis.....	270	42	24	18	228	201	6	1	8	7	.....	5	207	.....	3	1	35	24	29	108	141	16	2	.....
Follicular tonsillitis.....	124	28	14	14	96	85	6	.....	1	2	.....	2	107	.....	.....	1	8	8	11	54	60	9	1	.....
Diphtheria.....	314	163	86	77	151	124	10	.....	8	3	.....	6	197	16	26	24	17	31	67	88	182	27	16	1
Pharyngitis.....	35	7	4	3	28	24	1	.....	.....	.....	1	2	3	5	.....	.....	24	3	8	14	17	4	.....	.....
S. D.—No diagnosis.....	117	41	29	12	71	65	1	2	4	2	1	1	30	2	1	1	22	61	15	15	100	1	1	.....
Croup.....	12	4	3	1	8	6	1	.....	.....	1	.....	.....	.....	3	.....	1	6	2	.....	4	7	1	.....	.....
Sore throat.....	52	7	3	4	45	42	2	.....	1	.....	.....	.....	18	.....	.....	1	6	27	10	12	37	3	.....	.....
Scarlet fever.....	18	.....	.....	.....	18	16	.....	.....	2	.....	.....	.....	6	.....	2	.....	4	6	.....	4	14	.....	.....	.....
Precautionary.....	235	16	10	6	219	188	20	.....	6	4	1	.....	.....	.....	.....	.....	.....	.....	125	.....	.....	.....	.....	.....
Total.....	1,177	308	173	135	869	751	47	3	30	19	3	16	568	26	32	29	122	165	265	299	561	61	20	1
Secondary.....	256	97	39	58	159	129	7	.....	7	11	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Total, 1,433 for the year 1902.

Number of cases where 2nd culture was taken.....	113
“ “ “ 3rd “ “ “	28
“ “ “ 4th “ “ “	7
“ “ “ 5th “ “ “	7
“ “ “ 6th “ “ “	1
“ “ “ 7th “ “ “	1
“ “ “ 8th “ “ “	0
“ “ “ 9th “ “ “	1
“ “ “ 10th “ “ “	1

Duration of Disease in Secondary Cultures.

One day.....	3 cases.	
Few days.....	31	“
One week.....	43	“
Several weeks.....	62	“
One month or more.....	6	“

Number of cases where secondary
cultures were taken and patient
was not ill..... 15

Out of the 308 primary cultures found to be positive, in 265 cases the presence of the bacilli had already been found in the throat of some other member of the family.

EXAMINATIONS OF THE WIDAL REACTION IN CASES OF SUSPECTED TYPHOID FEVER.

The discovery of Widal that persons who had been affected with typhoid fever for a certain period of time developed within the system a certain toxic product which had the power of checking the life of the true typhoid bacillus grown outside of the body was utilized by the Board, as was the case in other States and certain cities.

This reaction is obtained by securing from the ear or the tip of the finger of the patient a single drop of blood. The serum of this blood, when mixed in certain proportions of strength with a large quantity of the living typhoid bacilli, causes the live organisms to grow sluggish in their motile action and finally to unite with others in the same mixture, producing a massing or clumping of the organisms.

This reaction may take place in from twenty to ninety minutes, according to the toxicity or strength of the toxic or antitoxic material in the blood serum tested.

The organisms which are subjected to the test must be at least twenty-four hours old, and not older. This necessitates the planting and growing of a fresh culture every twenty-four hours. To accomplish this, nutrient media of blood serum or agar agar must be kept on hand and in stock to continue the growth of the culture for stock purposes. From this stock growth, the amount of organisms which may be gathered upon the top of a needle is introduced into a nutrient media of beef broth or bouillon and here grown for the twenty-four hours.

As these facilities and all the paraphernalia necessary to make this test are not within the available time of the average physician,

it is necessary for some central laboratory to undertake this work.

As typhoid fever is a communicable disease, it is the duty of all States and municipal boards of health to aid the physician in these cases as far as possible, by establishing the knowledge of the presence of the disease as far as possible, the public as a whole receiving the benefit of an early confirmation of diagnosis and the better care of the patient and proper disposal of his excreta.

To facilitate the offer of the Board to make this test for physicians, typhoid "outfits" are placed at all the depositories where diphtheria culture tubes and sputum outfits may be obtained.

This outfit consists of a card upon which the history of the case may be entered, the name of the physician, etc. Also a small piece of thin sheet aluminum to receive the drop of blood taken from the patient, a three-cornered glover's needle for puncturing the skin, and a small wire loop for transference of the drop of blood from the skin to the aluminum plate.

A report of the result can usually be given to the physician, by telephone, on the morning following the day upon which the sample is received.

As a result of this offer of assistance, physicians availed themselves in many positive cases, and in many cases in which they were somewhat in doubt, as is shown by the following table:

Positive	47
Negative.....	111
Unsatisfactory.....	10
<hr/>	
Total.....	168

SMALL POX.

During the previous year the State, as was the case in all parts of the United States, was visited with a prevalence of small-pox. While the disease did not exist to an alarming extent, nor in proportion to its occurrence in other States, yet the number of cases was sufficient to cause anxiety and activity on the part of health officers.

Most every part of the State had had experience with one or more cases, but at the close of the year the disease was more prevalent in the city of Woonsocket and vicinity than elsewhere.

Small-pox continued to appear in different places throughout the year, but by vigilant inspection, by prompt report of cases both by the physician and the laity, isolation of the affected patients at their homes or in improvised hospitals and camps, and with extended vaccination, the epidemic waned towards the last of the year.

Great credit is due to the health officers for their vigorous and prompt attention to the routine of prevention, although at times many difficulties and much opposition arose from the foreign population, which could not see the needs of our requirements for the suppression of the disease.

Cases would be imported, remaining at work during the full course of the disease, and would not be discovered until subsequent cases in the same workshop or mill called attention to the existence of a skin eruption in some one previously which was similar to the new discovery.

Most of the cases were so mild, the type of the epidemic everywhere being of a mild character, that the patients would not realize that the fever of a few days and a slight eruption which gave little annoyance could amount to anything, so they would continue at their work and mingle with others.

When the disease occurred in one member of an unvaccinated family, and there were many of this class in the foreign population, many other members of the family would have the disease. If the case was discovered in its first stages, prompt vaccination of the others showed good results and absence of the disease.

The State may feel itself fortunate that the spread of the disease was so limited, when comparison is made with its spread in States to the north and west.

CENTRAL FALLS.

The first case to appear in the city of Central Falls was on February 16th. This was followed, on March 12th, by another case in the person of a travelling salesman who probably contracted the disease while on a visit to Manville in the prosecution of his business. He had been sick for several days before his case came to the attention of the health officer who upon examination pronounced it a case of small-pox and ordered his removal to the detention hospital.

The next case to come to light was on March 23rd, this case being a mill operative, who had been sick for about a week without any attending physician. This case, together with three others discovered at the same time, was also removed to the hospital.

During the following month two more cases developed, neither of them having ever been vaccinated. These were discovered on the 16th and 20th. respectively, the latter having been sick for over a week but not calling a physician during that time, under the impression that it was nothing more than a simple case of ivy poisoning.

During the next two months no new cases developed, but during the month of July four more cases were discovered and sent to the hospital, one of these cases being of a very mild form and of unknown origin. The cost to the city for these patients at this time amounted to about \$150.00 per week.

After the discharge of the above mentioned cases, the city enjoyed an immunity from the disease until about the middle of December, when another case, in the person of a young woman who had come to

this city from Hebronville, Mass., appeared. The patient was at once quarantined in her boarding-house pending the time it would take to place the detention hospital in readiness. The origin of this disease could not be traced.

CUMBERLAND AND LINCOLN.

After having been free from the disease ever since August of the previous year, the village of Manville was again visited by small pox on January 14th, this patient being a mill operative living on the Cumberland side of the river. He had come to this village from Canada about three months before, and had never been vaccinated. He had complained of feeling ill three days before, but had continued to work in the mill and had not called a physician. This was discovered by the health officer while on a tour of inspection, and he immediately ordered the patient removed to the hospital built for that purpose during the previous summer, and the house quarantined.

On January 18th, word was received from the authorities at Northbridge, Mass., that a small-pox patient confined at the hospital there had escaped from that institution and had gone presumably to Rhode Island. A sharp lookout was kept, and later the man was located in a house on the Lincoln side of the river. He was taken into custody, and the house he had taken refuge in was thoroughly fumigated. Word was sent to the authorities in Northbridge, who came and conveyed him back to that place. It was afterwards ascertained that he had ridden on the train as far as Woonsocket and had walked the rest of the distance to Manville. A systematic search for all places along the route where he was suspected to have stopped was made, and these places, when found, were thoroughly disinfected.

On February 26th, the health officer of Lincoln, while in company with the secretary of the State Board of Health on a tour of inspection, found evidences of three cases of small-pox in a family on the Lincoln side, one of them being dead upon arrival. Upon entering this place they found a two-month-old baby in a white coffin, the face of the child being covered with typical small-pox eruptions. The

lid of the coffin was immediately screwed on and the coffin carried out to an undertaker's wagon and taken away. One other of these cases, a five-year-old child, was in a state of desquamation when seen, while the eruption on the third child was not very far advanced. Further inquiry elicited the information that the father of these children was employed in Providence as a machinist, and that he had been travelling between these two places on the steam cars at least twice a day during all this time. The house was immediately placed under quarantine.

During the month of March five more cases were discovered, one on the 17th on the Lincoln side, and two on the 26th on the Cumberland side, the latter being in one family. None of these cases had ever been vaccinated. Two more cases in this latter family followed a few days later.

Two more cases developed during the following month, one, on the 3rd being in a family on the Lincoln side where there was a strong suspicion of the disease having existed and the patients having recovered before the discovery of this case. On the 4th another case in the person of a mill operative, also on the Lincoln side, was discovered.

The last case to be discovered was on the Cumberland side of the village in the person of a fifteen-month-old infant in the same family where the disease was discovered on March 26th, and which furnished two more shortly after.

EAST GREENWICH.

On May 11th this town was visited with one isolated case of the disease, this case being a prisoner in the Kent county jail, and who had been confined there since the previous October. The jail was at once quarantined and provision made for all future commitments of Kent county prisoners to the Providence county jail.

This case lasted until June 28th, when the quarantine was raised. The origin of this case remained a mystery.

EAST PROVIDENCE.

After a lapse of over a year the town of East Providence was again visited by small-pox. This case was brought to the attention of the health authorities on April 11th. The patient was one of a gang of men who had come from Boston a few days before to work on the new railroad bridge of the Consolidated Railroad. He was feeling ill upon his arrival, but continued at work, and did not call a physician until the 11th. The physician called was not long in coming to a conclusion that this was a genuine case of small-pox and at once communicated with the secretary of the State Board of Health, who upon arrival promptly corroborated the attending physician's diagnosis. The house was immediately quarantined, as there was no place available to which the patient might be removed. This case was an unusually severe one, and resulted fatally on April 15th. The other sixteen inmates of the house, including two nurses, remained under quarantine until April 28th, when, as no new cases had developed, the quarantine was raised. Three days after this, however, one of the nurses was stricken with the disease in a mild form, but made a quick recovery.

One more case made its appearance in the village of Riverside on July 10th. This case was a child who with its parents had arrived at that place from New York a short time previously. The child had been sick for about five days before a physician was called, and the disease was first thought by the physician to be chicken-pox, but upon consultation with another physician the diagnosis of small-pox was agreed upon. The health authorities were immediately notified, the house quarantined, inmates vaccinated, and no other cases resulted.

On August 16 the contract for building a hospital for all future cases of this disease in this town was awarded by a committee appointed by the town council, work on this building to be begun at once.

NEWPORT.

As during the previous year, the city of Newport was visited with

but one case of small-pox. This case was a woman who during the latter part of December had arrived in this city, having left the west a few weeks before with her husband and stopping in New York for a day or two on her way. On arriving at Newport she had gone to the house of a relative and had stayed there while looking up a tenement. She was feeling ill upon arrival, but did not call a physician until about week after. The physician called, having his suspicions, immediately summoned two members of the board of health, who, upon examination of the patient, did not hesitate to pronounce it a well-developed case of small-pox. The house was immediately quarantined and all necessary precautions taken, and no other cases developed from this one. This case resulted fatally on December 29th.

NORTH KINGSTOWN.

After an immunity of twenty-one years from this disease, the town of North Kingstown was visited with a case of small-pox on April 20th. This occurred in the town asylum at Quonset Point, in the person of one of the inmates of that institution. He was at once removed to an adjoining building and the place thoroughly fumigated.

Only one other case developed in consequence of the above. Curiously enough it was in the person of the attending physician of the same. He was vaccinated at about the time of the discovery of the first case, but it is believed that he had already contracted the disease at that time. He was quarantined at home, and soon recovered.

PAWTUCKET.

On February 14th a case of small-pox, the first since the previous October, was discovered in this city. This case was a woman of 68 years of age who was supposed at first to be suffering from chicken-pox, but which was afterwards pronounced by the health officer, upon examination, to be small-pox. The disease was in all probability contracted from a grandson who had been visiting her a short time previously and who had a suspicious eruption on his face at the time of his visit. Further inquiry elicited the information that said grandson was at

present under surveillance in Boston as a suspect. It was not deemed advisable to reopen the hospital for this one case, so she was quarantined at home, where she soon recovered.

Nine more cases followed during March, two of them being in one family, and five in another. One of these, discovered early in the month, was a peddler who about two weeks before had visited Boston, Brockton, and other places where the disease was prevalent, and may have contracted it in one of these places. At about the same time another case was discovered and sent to the hospital with this one. This latter case, a weaver, became delirious on March 15th, and escaped from the hospital. While crossing the street he was struck by an electric car and injured. He was carried back to the hospital, where he died shortly after.

On March 13th another case, a son of the above mentioned, was discovered and taken to the hospital. He had been vaccinated at the time his father was taken with the disease, but had probably contracted the disease before that time.

On March 17th one case and on March 18th four more, all five being in one family, were discovered and removed to the hospital. All of these people had been previously vaccinated, but in no case did the vaccination take.

On March 21st another case developed undoubtedly as a result of contact with one of the previously mentioned cases, since one of the above mentioned patients had called at her house a short time previously.

Three more scattered cases were reported during the year, one on April 14th, one during the latter part of July, and one on December 1st, the last mentioned having come from Boston, where her husband had died of small-pox about two weeks previously. It was found necessary to reopen the hospital, which had been closed ever since August 16th, for this patient.

PROVIDENCE.

From December 23, 1901, to September 23, 1902, forty-eight cases,

with six deaths, occurred. (See report of the Supt. of Health, page 81.)

WARREN.

On March 3rd a case of small-pox in the person of a young child of French Canadian parentage was discovered in the town of Warren. This occurred in a thickly settled section in the northern part of the town, where dwelt a large number of mill employees. This child had, with its parents, recently returned from a visit to Woonsocket, at which place it had been exposed to and contracted the disease, having never been vaccinated.

The physician called in attendance, having at once pronounced the case one of small-pox, lost no time in immediately communicating the facts to the town council, which body promptly quarantined the place, there being upward of twenty people in this tenement alone.

On March 5th another case, directly traceable to the above, developed. This was a mill employee, an uncle of the above child, and who had gone to Woonsocket with the child's mother to bring back the child. The house where he lived, and which was also in the same section of the town as the previous case, was also quarantined. This case was of about three weeks duration, and was steadily improving, when, on March 26th, he suddenly died.

On March 17th six children of the above mentioned case were stricken with the disease, on March 19th three cases, and on March 21st four more, all of these thirteen cases being in the two tenements where the above mentioned cases occurred.

On April 11th another case was discovered. This was in the person of the undertaker who had conducted the burial of the second mentioned case. It was not believed, however, that that was the cause of the disease, as but eight days had intervened since that time, but it was believed that he had contracted the disease from some other source. He had been ill about a week before a physician was called, which physician at once pronounced it a case of small-pox in a light form. He was quarantined at home, and made an uneventful recovery.

It is interesting to note that, with the exception of the last mentioned case, the disease was kept confined to one small locality owing to the prompt and aggressive action on the part of the health authorities.

WARWICK.

The town of Warwick, in common with other localities in this State, was visited with small-pox during the early part of the year; but, unlike these other localities, the presence of the disease was without fatal results, and, while of long duration, was confined to but few, and its spread prevented by prompt and vigorous action on the part of the health officials.

The disease first made its appearance on February 17th, in the village of Crompton, in the person of a man employed in the spinning room of the Crompton mill. This man had visited Central Falls some time previously, and had contracted the disease there. During the three or four weeks from the time he was taken sick to the time the nature of his disease was discovered, he had worked steadily in the mill and had communicated the disease to another member of his family. On the same day another case was discovered in the person of an operative in the same room at the mill where the first mentioned cases were employed, and to whom the origin of this latter case was traced.

On March 12th, a travelling picture dealer was taken from a hotel at Arctic Centre to the detention hospital, suffering from the disease in a confluent form. This man had been travelling about in Woonsocket, Boston, and in other infected places, and was taken ill on arriving at Arctic Centre, where the physician called immediately diagnosed the case as one of small-pox of a virulent type. This case was ill for a long period, the disease being the most stubborn of any in this town.

A day or two later three cases, and on March 16th one other, all four in one family, were discovered in the village of Crompton. These cases were all quarantined and treated at home, and made quick and uneventful recoveries.

The next place to be visited by the disease was the village of Natick, where on March 21st, a young girl whose family had been entertaining guests from Woonsocket was taken sick and removed to the hospital. Less than two weeks after the discovery of this case an infant of four months of age, whose mother worked in a mill at Centerville, and whose family had visited the family of the previously mentioned case, was stricken with the disease.

Two more cases were discovered in Natick in the persons of two sisters who were taken ill on April 22nd and May 2nd, respectively. These were also removed to the hospital.

On March 27th, at the aforementioned hospital in the village of Old Warwick, a man who had been engaged as a nurse there contracted the disease. This man had never been vaccinated, claiming that he was immune, having had the disease several years before. This statement, however, was not credited by the health officers.

After this case was discharged the town enjoyed an immunity from the disease until the latter part of the year, when, on December 3rd, it again made its appearance, this time in the village of Hillsgrove, in the person of a young woman employed in the mill there. Two weeks previously she had come from Canada, where she had probably contracted the disease, and although ill at the time of entering the mill had worked steadily there until the superintendent, having noticed a suspicious eruption, summoned the health officer of the town, who, after calling in consultation the secretary of the State Board of Health, pronounced the case to be one of small-pox.

It was ascertained by the health officer, upon inquiry, that the brother of this young woman, whom she had left in Canada, had been ill with an eruptive disease which, from the description furnished, was undoubtedly small-pox. As she was at the period of desquamation when seen by the health officer, it was a matter of serious speculation as to how many persons she had come in contact with on her trip from Canada and during her brief employment in the mill.

On December 17th two more cases, which were directly traceable to the above mentioned case were discovered. These were a brother

and sister who were cousins of the first case, and who had frequently visited her after her arrival from Canada. Neither of them had ever been vaccinated. They were both taken to the hospital, as was the first case, and the house quarantined.

Two more cases, also directly traceable to the first case, were discovered in the same village on December 20th. These were also a brother and sister who had come in contact with the first case. They had both been vaccinated upon the discovery of said case, but had in all probability contracted the disease before vaccination. They were promptly taken to the hospital, and the house was quarantined.

WOONSOCKET.

At the close of the year 1901, Woonsocket had had about 17 cases of small-pox, many of which had been treated at the convenient and commodious isolation cottages erected for this purpose.

But for the appearance of five new cases, the hospital would have been closed within a week or ten days.

On December 30th, however, a woman operative in one of the mills called at the office of the health officer, Dr. W. C. Monroe, and presented a typical eruption of small-pox which had lasted for three days. It was ascertained from her that she had been working by the side of another girl who had had a similar eruption for several weeks. This case was investigated, and the second case was found to be in the stage of desquamation. It was also ascertained that a man working in the same room with these two cases, and who had the disease developed to a desquamating stage, probably contracted the disease from the second case, which was now desquamating. This man lived in Manville and was quarantined there by the health officer, Dr. J. W. Walker.

The two young women were removed to the isolation hospital and the operatives in the room where they worked were vaccinated, but objection was made to this procedure by some of the attendants. By January 7th, 1902, the room where the girls worked had furnished seven cases of small-pox.

On January 3rd another case was discovered, in a wringer works, which case had advanced to the second week of the disease. On the following day another case, in the person of a rubber worker, was discovered in a stage of desquamation. This made the twelfth case in the recent outbreak.

On January 7th three more cases were discovered in one of the mills, all of said cases having an eruption of several days' standing.

One week after, two other cases were reported. One of these was in the person of a rubber worker who had never been vaccinated, and who presented a case commonly known among the Canadians as "black small-pox." This case proved fatal.

On January 18th two new cases were discovered. One of these had been working in Rockdale, Mass., where numerous cases were in quarantine. The other case came from the rubber mill where other cases had occurred.

On January 23rd another case was discovered in one of the public schools. This child had been sent home from school by the teacher, who had noticed a suspicious eruption. Examination by the health officer proved the case to be one of typical small-pox of a light form. The child had been vaccinated during the previous summer, but without success.

On January 25th eight more cases were discovered. One of these was an operative in one of the rubber mills. He had been previously vaccinated several years before. Four others of these cases were the wife, two children, and sister of the case reported on January 14th, referred to as "black small-pox," and which subsequently proved fatal.

Three more cases came to light on January 31st, one of these being the mother of the case above referred to, and who had nursed him through his illness. Another of these was a woodchopper who had never been vaccinated.

On February 4th another case developed. This was a young girl who with her mother had arrived in the city from Canada about a week previously. She had been vaccinated before leaving Canada but had probably contracted the disease before vaccination.

On February 6th a resolution that the delegation from Woonsocket to the State legislature be instructed to secure, if possible, legislation in favor of compulsory vaccination the in State of Rhode Island was introduced in the common council and passed by that body. It was pointed out that the hospital erected for that purpose would now accommodate 56 patients, which would relieve the city of an expense of between \$300 and \$400 per week for small-pox guards. Eleven thousand five hundred dollars had already been appropriated, and \$5,000 more was needed at once. This was appropriated at the meeting, and a like amount was promised the following month. Since the present outbreak 12 patients had been discharged and 2 had died, making a total of 72 cases in the winter's lot, or a total of 89 since last summer.

On February 8th the number of cases was augmented by four. Of these, one was a carder in one of the mills and had been sent home by the superintendent on account of a suspicious eruption. When the health officer reached the place where he boarded, after having received report of the same from the superintendent, the patient had disappeared. He was traced to a saloon and from thence to a drug store, and found in front of the same, taken into custody and sent to the hospital. He had probably contracted the disease in Rockdale, Mass.

Ten more cases followed on February 10th. Of these, two children in the same family had had the disease for five or six weeks, had been attending school regularly during this time, and were desquamating when discovered. Two others were children of the same family as the case discovered on January 23rd. Still another lived in the same block where the fatal case reported January 14th occurred.

Two cases followed on February 12th; seven, four of which were in one family, on February 13th; eleven, six of which were in one family, on February 15th; and ten, four of which were in one family and five in another, on February 17th. All of the latter five cases were desquamating when discovered, having had the disease for about four weeks.

Cases continued to crop out with great regularity during the following three months, there being three reported on March 4th, two on March 13th, five on March 14th, and five on March 17th, three of the latter being in one family, and who had all been vaccinated several times before, but without success.

One case was reported on March 18th; two cases, which had been sick for about four weeks when discovered, on March 19th; one case on March 20th, five on March 21st, three on March 25th, one on March 26th, and three on March 27th. Three deaths were reported during this month.

The record for April was as follows: April 4th, one case; April 10th, five cases; April 12th, three cases; April 23rd, three cases, all of which were in one family; and April 29th, four cases. The mortality record for this month was five.

But five cases were reported for May: two on the 2nd, two on the 3rd, and one on the 16th. One death was reported during this month, and also one in June.

At a meeting of the board of aldermen held on July 14th, the health officer reported the epidemic at an end, there being but one case (an infant) in the hospital at that time. Since the discovery of the first case on July 13th, 1901, up to the present time there had been 370 cases of this disease, 25 of which had resulted fatally, the disease having increased in malignancy as it progressed. The largest number of patients under quarantine at any one time was 120, and the largest number of houses under quarantine at any one time was 31. The health officer had made during the epidemic just 11,600 calls upon small-pox patients. Upward of 20,000 free public vaccinations had been made, the exact number not being ascertainable at that time, since not all the physicians had as yet made returns. The cost to the city had been \$44,500.00 or an average of \$120.00 per patient.

At the same meeting there was passed in concurrence a resolution appropriating \$4,500.00 for the purpose of finishing paying expenses incurred.

INSPECTION OF SANATORIA FOR TUBERCULOSIS.

That the Board might be properly informed in regard to the manner of care of the consumptive in sanatoria, and as to the character of the buildings found useful in housing them, and as the pending legislation to provide for the erection of a sanatorium for incipient cases of tuberculosis in this State made it necessary that the Board should be familiar with the requirements of such an institution, visits were made to the following institutions.

On February 13, 1902, a visit to the Free Home for Consumptives at Dorchester, on Quincy street, presented an institution maintained for the purpose of receiving and caring for cases of consumption in any or all stages. The building occupied at present is a residence, having only four or five rooms which may be used as wards. In these rooms and also in the entry, when necessary, there are accommodated thirty or more patients. The control is under a board of managers of a philanthropic society of Boston, the direct supervision being that of the Superintendent, Miss Bowers, to whose continuous and efficient efforts the success and maintenance is due. A corps of nurses and attending physicians is provided. No board is charged, the attendance as a patient being free, regardless of sex, age, color, or creed.

Near this hospital, or home, there has been erected, as the result of the work of the society and the superintendent, a large three-story building, intended as a larger home, or sanatorium, capable of accommodating 150 patients. The building is fully equipped with a steam heating plant, a complete laundry and culinary equipment, is piped for gas and wired for electricity. It is situated on quite an elevation, and a view of Boston harbor may be obtained from the upper

stories. Although not occupied at present, on account of lack of funds for furnishings and maintenance, it is anticipated that the wards may be made ready for patients by next fall. The cost of the building and its present equipment has been about \$60,000.00.

Cases of consumption in all stages of the disease were seen, most of them being hopeless cases.

Only a slight attempt could be made to provide a suitable amount of air for each patient, owing to the advanced condition of the disease and the necessity of overcrowding. While some of the cases are brought to a stand, or the disease is arrested, yet a fatal termination is to be looked for in the majority of cases. The patients, however, receive earnest, sympathetic, and careful attention, with forced nourishment, during the last days of their life, although these may be few. This is greatly appreciated by the patients, and the isolation of these cases and the care of the sputum serve to remove many centres of infection from the public.

On the following day a visit was made to the Rutland State Sanatorium, located in Massachusetts.

This institution was found to be located on a high elevation, so situated as to command an exposure to the south and east, having an extended view of the surrounding country. An inexhaustible supply of pure water is obtained from a lake near by. Considerable attention and expense was given to the disposal of the wastes by means of a sewage system advised and approved by the State Board of Health of Massachusetts.

The dormitories are all connected by corridors with a common corridor arranged in a crescentic form, with the administration building in the centre. The buildings were one story in height, but new construction of wards and administration buildings is to be two stories. The inside of the buildings are plastered, and all of the outside covered with a weather plaster held by a foundation of wire netting. Much of this plaster has a tendency to fall off, owing to decay of the netting.

The main treatment of the patients consists of continuous living in the open air, day and night. The windows of the wards are never

closed, except for a few minutes morning and night, upon arising and retiring; and during heavy storms, to protect the woodwork and floors.

The institution accommodates about one hundred and fifty patients, and an increase in the number of buildings, with an administration building, a new dining hall and recreation hall, will accommodate over one hundred more.

The cost of operation is about eight dollars per patient per week, one-half of the expense being maintained or sustained by the payment of the patients of about one-half the cost, the other half being assumed by the state.

No cases are received into the institution unless there is probability of arrest or improvement in the condition of the disease. All of the inmates seen by the Board presented ruddy, healthy, bright and cheerful appearances, lounging on the piazzas, in the open, in the sun rooms, or tramping about the hundred acres of grounds belonging to the State, much of which is wooded.

VISIT TO THE FILTRATION PLANT OF THE WATER WORKS OF LAWRENCE, MASS.

In view of the questions asked of the Board concerning the value of different methods of filtration, a visit was made to the sand filtration plant, of the city of Lawrence, Mass., on March 31, 1902.

The filter has an area of two and a half acres, and is capable of filtering 5,000,000 gallons per day. It is constructed as a single bed, and hence is entirely out of operation when being scraped or cleaned. Owing to the high latitude of the location, much trouble is experienced from the formation of ice during the winter months. Especial apparatus and machinery has been constructed to handle the ice, cut it up, and dump it over the banks into the river. The cost of this procedure adds greatly to the expense of operation. Plans for covering the entire bed are now under consideration.

The process of scraping the beds was demonstrated, and the method of cleaning the dirty sand removed was shown.

WORK UNDER THE MEDICAL PRACTICE ACT.

During the year there were granted forty-two certificates to practice medicine under the law governing such practice. Of this number, six certificates were granted upon presentation of a diploma from a school recognized by the Board as in good standing. Thirty-five were issued upon passing a satisfactory examination, and one under the time-limit provision of having been reputably, honorably, and continuously engaged in practice prior to January 1, 1892.

One prosecution of a health specialist was made. One applicant was refused a certificate and appealed to the Supreme Court for a reversal of the action of the Board. The decision of the Board was sustained. Reports of these cases will be found in the body of this report.

EXAMINATIONS UNDER THE MEDICAL PRACTICE ACT.

An amendment to the medical practice act, Chapter 165, being made November, 1901, it became necessary that all applicants for a certificate to practice medicine in this State should pass in a satisfactory manner such examination as the Board might require.

This examination was interpreted by the Board as being sufficiently strict as to determine the practical knowledge which would be required of the average physician upon whom the public might rely in case of sickness or accident.

During the year, forty-nine applicants underwent examination. Of these thirty-five passed successfully. Of the unsuccessful applicants, two were midwives. These persons had been in the practice of midwifery for many years, with more or less success. Numerous deaths of children and an occasional death of the mother resulted. This

information was derived from regular physicians who were called in by the midwives when they found that the labor was not progressing satisfactorily, or when the child or mother was about to die. In these instances the physicians have stated that if the mother or the child had received proper attention from the beginning of the case, death would not have resulted.

One midwife, an Italian, stated that she could neither read nor write in English or in her native language, but that she had been in the practice of midwifery in this State for many years, and that she was fully competent to practice midwifery inasmuch as she "came to it by natural."

This person applied for permission to take the examination to obtain a certificate to practice medicine. She was not only unable to answer the simplest questions of the examination, without which no one should attempt to practice midwifery, but she also showed a total ignorance of the first principles of midwifery, or obstetrical practice.

REFUSAL OF CERTIFICATE IN THE CASE OF DR. HENRY ROBERT SURLES.

On November 26, 1901, application for a certificate to practice medicine in this State was made by Dr. Henry Robert Surles. The applicant desired to be granted a certificate on the presentation of a diploma from the Hahnemann Medical College of Chicago, Illinois.

This college was rated as in good standing by the Board, and the certificate was ordered issued to the applicant.

The certificate had been made out, but before it could be delivered information was received by the Board that Dr. Surles had issued, or caused to be issued, certain circulars advertising a particular form of vaginal syringe. Dr. Surles claimed to be the patentee of this device. Certain statements occurred in the circular which, in the opinion of the Board, might lead to a misrepresentation. Upon some of these circulars appeared the statement that Dr. Surles was a graduate of the College of Physicians and Surgeons of England. No

statement or declaration of the possession of a diploma from this last named school was filed in the application made to the Board, and no statement to that effect was presented at any time.

The Board, therefore, issued a notice to Dr. Surles to appear before the Board and show cause why a certificate should not be issued to him.

Dr. Surles appeared at a hearing held April 17, 1902, accompanied by legal counsel. In the evidence presented by him it was shown that the applicant had been convicted of criminal abortion in the State of Massachusetts, and had served a six or seven years' sentence; that he had come here to Rhode Island and had immediately issued the circulars which contained material common to this form of advertisement. He claimed that many of the circulars had been sent out with his name stamped upon them by a man with whom he had entered into business relations for the purpose of exploiting this syringe. He was aware of the fact that they had been circulated. He stated that he had objected to this to his partner, but had made no further effort in that direction.

In explanation of the statement which appeared on the circular, to the effect that he was a graduate of the College of Physicians and Surgeons of England, he stated that he had been possessed of certificates and diplomas showing his successful acquisition of that title, but the papers so received by him, he stated, had been destroyed by fire, or lost or taken by some one who had enmity against him.

Being assured by his counsel that much evidence could be presented to show the good standing and high moral character of the applicant, if time was allowed, the Board adjourned a continuation of the hearing until April 23, 1902.

Witnesses who attested to the good standing of Dr. Surles in the city of Worcester as a citizen up to the time he "got into trouble" in the matter referred to, and also to his good standing in a fraternal order of which he was a member and medical examiner, were presented. Dr. Surles presented a certificate permitting him to practice

in Illinois, issued upon the diploma given him by the medical college in Illinois.

As a result of this hearing, the following decision was issued to Dr. Surles:

STATE OF RHODE ISLAND, &C.,

PROVIDENCE, SC.

BEFORE THE STATE BOARD OF HEALTH,

In re. CERTIFICATE OF HENRY ROBERT SURLS.

This matter came on to be heard at room 314, in the State House, Providence, R. I., April 17th, 1902, after due notice to Henry R. Surles to be present, and, it appearing from the evidence submitted that said Surles was convicted before the Superior Court of Worcester County of performing an abortion upon the body of one Murphy and sentenced to eight years imprisonment in the state's prison of Charlestown, this Board finds said Surles to be a person not of good moral character who has been guilty of gross, unprofessional conduct, and that said conviction of said crime has, in the opinion of said Board, rendered said Surles an unfit person to practice medicine in this State. Therefore, it is now ordered that the certificate to practice medicine, ordered to be issued to said Surles on the ninth day of January, but not delivered to him, be and the same hereby is revoked.

Attest:

GARDNER T. SWARTS, M. D., Sec'y.

ALBERT G. SPRAGUE, M. D., Pres.

Thereupon Dr. Surles entered an appeal, before the Appellate Division of the Supreme Court, from the decision of the Board in refusing to issue to him a license.

The appellant attempted to show that his character was correct, and that he had done nothing in this State which should prevent a certificate being properly issued to him. The representation of the Board evoked evidence from the appellant as a witness the statement that he was aware that certain circulars bearing his name and office address had been freely spread about the city and that they represented in the statements contained within the circular that a certain kind of syringe manufactured under his patents would produce certain beneficial effects; also that the printed statement or advertisement contained in one of the circulars to the effect that he was a

graduate of the "College of Physicians & Surgeons of England" was correct, and that he had at one time diplomas from that institution, but that these documents had been lost or destroyed. He also made statements as to his trial, conviction, sentence, and commitment to jail in Massachusetts for criminal abortion.

The secretary as a witness declared to the court that he knew of no such college in England as named by the appellant. That there existed a college of Physicians and a College of Surgeons, two distinct institutions, issuing distinct degrees; also that written statements of the recorders of these institutions were to the effect that the name of Henry R. Surles was not to be found on their records. The attorney for the appellant, Mr. Robinson stated to the Court that he was about to visit England, and assured the court that if given a sufficient time he would be enabled to produce evidence from the records in England which would prove the claim of his client.

The court granted him this time, setting a date reasonably distant for the purpose.

The date for the presentation of this new evidence arrived, but the attorney for the appellant not appearing, the court handed down a decision sustaining the action of the Board.

CASE OF THE STATE BOARD OF HEALTH *vs.* SEVERE PAQUIN.

Information was received by the secretary of the Board that a person by the name of Severe Paquin, located in the town of Warren, had been engaged in the practice of medicine in so far as he had been employed to attend a woman in confinement, acting as a midwife, accoucher, or obstetric physician.

The child, resulting from this labor, was born dead. The medical examiner of the district who had been called in to sign the death certificate, upon inquiry and investigation found that the conditions of the confinement were such that, had a regular and intelligent physician been present, the life of the child might have been saved.

The Board had for some time received rumors that this man had been receiving cases in his office, and other cases; but until there was a death which might have been avoided, and which led to indignation and reprisal on the part of the patients affected, no evidence which could be satisfactorily presented to the court was obtainable.

This man was well known to his fellow countrymen as one who in a small shop conducted the business of selling clocks and small wares, of repairing shoes as his principal occupation, and that in a rear shop he was prepared to receive, and did receive, patients whom he advised as to their ailments, and prescribed certain pills and potions which he kept in stock for the purpose of the cure of these ills.

Yet while many reports of this kind were received by the Board, no one could be found who was willing to testify as to the conditions existing. As usual, it required the death of some one whose loss was appreciated by the relatives, to cause them to serve voluntarily as witnesses.

This person, being arrested, was heard before the fifth district court in Warren, was found probably guilty, and remanded to the grand jury.

The evidence presented showed that the defendant was solicited to attend the mother of the child when her labor should occur. The price for such attendance was agreed upon and paid to the defendant at the time of labor.

The regular physician having testified that, having been called to see this case, from the statements of the parents and the attendant relatives, from the conditions found in the child, which was found dead by them, and from the statement of one of them, who was a medical examiner called to view a case of a person found dead without medical attendance and under suspicion of violence or neglect, it was shown that the child might have been alive had proper medical attention been given instead of the use of a charlatan assuming the responsibility of sickness, life and death, without proper knowledge.

The defendant pleaded nolo, paid his fine of fifty dollars, and, as subsequent evidence showed, again resorted to practicing medicine

upon his willing countrymen, who were attracted by his earnest declarations and promises of success, and by his small fees.

It was evident that he would be enabled in a very short time to pay the amount of his fine, costs, and lawyers' fees.

This person, the defendent, was already upon the records of the Board, having been refused a certificate to practice medicine, on the ground that he had not a proper knowledge of medicine, as shown in the report for the year 1896.

Upon refusal of the Board to grant a certificate this person had appealed to the Supreme Court for reversal of the decision of the Board.

At the hearing before the Supreme Court it was shown that the applicant had no knowledge of medicine; that his occupation was that of a cobbler. By his own assertions his knowledge was limited to the perusal of a large and thick volume dedicated to the practice of medicine. A certain clergyman testified in his belief in the applicant's knowledge, citing his close application and study to this book.

On the part of the Board it was possible to show that the applicant had, through his assumption to treat disease and through his ignorance, been the cause of much suffering and mutilation of certain important parts of a person who had been foolhardy enough to submit to his treatment. The results of strong acids applied had resulted in the destruction of important tissues and organs, the condition produced by the maltreatment being shown by the presentation of a photograph presented to the court in evidence.

The Supreme Court decided that the appellant had not established a reputation as a safe person to practice medicine upon the public; and the decision of the Board, not to grant him a certificate, was confirmed.

INVESTIGATION OF THE CONDITION OF THE WATER SUPPLY OF BRISTOL AND WARREN.

Complaint having been made to the Board that the condition of the public water supply of Bristol and Warren might be prejudicial to the health of the consumers, the attention of the Board was called to the matter at a special meeting held September 18, 1902.

Present, Dr. Sprague presided in the chair; Mr. Locke, Drs. Darrah, Briggs, and Swarts.

The purpose of the meeting was for the consideration of the condition of the water supply of the towns of Bristol and Warren

The Secretary explained that with Mr. Gray, a member of the Board, he had on the previous Saturday inspected the water-shed of this supply, and had found many indications of neglect of the supply, and several places where contamination of the supply might occur as the result of the presence of cows and hogs on the banks of the stream or Kickemuit river.

Some photographs, contributed by Mr. Gray, were shown.

It was the opinion of the President that the Board should visit and inspect the water-shed in a body, and a meeting was called for September twenty-sixth for that purpose.

September 26, 1902—

The members of the Board met this day, Drs. Sprague, Briggs, and Swarts at the Bristol and Fall River station in Providence, and later met Dr. Darrah and Mr. Locke at Warren, and took carriages on a tour of inspection of the water-shed of the water supply of Bristol and Warren, taken from the Kickemuit river.

The following points were visited, and the following conditions found to be present:

1. At the dam near the pumping-station, the tide of salt water was higher on the outside of the dam than the fresh water impounded in the reservoir. It appeared possible, at extreme high tides, that the water might dash through the dashboards placed at the spillway,

or overflow. According to the statement of the engineer at the pumping-station, this had occurred.

2. The filtering crib of small stones which covers the pump-well or intake of the pumping-station pipe was uncovered from water and was overgrown with a profuse growth of weeds.

3. The warm water delivered from a large pipe, and coming from the condenser of the pumps and exhausts, flowed against the intake filtering crib. A certain amount of oil, coming with this water, was observed floating on the surface of the water.

4. Between the lowest dam and the next dam, or roadway, above, much of the bottom of the reservoir was uncovered, on account of the low state of the water. The uncovered portions were covered with a dense moss-like growth of vegetation.

5. A graveyard was found on the side of the reservoir, in which burial had been made within five years.

6. At the roadway which separates the lower reservoir from the one above, several tin cans had been thrown into the reservoir, and the water had a turbid appearance. A deposit of human excrement was found upon the walls of the roadway within a few inches of the edge.

7. At a point further up the river, as the road crosses the brook supplying the reservoir, a driveway diverges through the brook for the accommodation of horses and cattle. A herd of about twelve cows was being driven from this point at the time of the visit. The cows had passed through the brook, and deposits of cow excrement had been left on the edge of the stream.

8. Further up the stream, on a branch supplying the main stream, at a point where it crosses a roadway, was found a dead pigeon. Two pigs only were in sight, but they had established a wallow-hole on the side of and in the stream.

9. A view from the embankment, or dam, of the upper, or main, reservoir disclosed large areas of uncovered land, or bottom of the reservoir, but which had innumerable stumps or roots scattered over the surface.

10. At the head of the supply, and upper end of this upper reservoir, was a piggery accommodating, at the time of the visit, fifty pigs, large and small. The surface flowage from this land could, in times of heavy rains, and with frozen ground, find its way, by means of a ditch, to the reservoir.

11. A view from the banks of the reservoir at this point showed large areas of dead stumps, roots, and decaying vegetable growths and deep oozy mud, and the remains of decayed plants and water growths.

Returning to the city by train, the meeting was adjourned.

October 3, 1902—

A meeting of the Board was held this day at the State House. Present, Dr. Sprague, President; also Drs. Briggs, Budlong, Darrah, Swarts, and Mr. Locke.

The results of the examination of the water-shed of the Kickemuit river were taken up for consideration, and the Secretary was directed to transmit a copy of the following conclusions and directions to the towns of Bristol and Warren and to the Bristol Water Works Company:

OCTOBER 3, 1902.

To the Town Council of Bristol,

Bristol, R. I.

GENTLEMEN:—At a meeting of this Board held to-day I was directed to call your attention to the condition of the water supply now being delivered to your townspeople and to the conditions of pollution existing upon the watershed of the Kickemuit river from which your water supply is taken.

Recent inspections, by the members of the Board, of the reservoirs on this river, of the river itself, and its tributaries, show that the sides of the same are frequented by cattle and pigs and made use of by them, the upper reservoir is allowed to be the resort of fishing parties making unwholesome use of the same, that large areas of decaying stumps, weeds, grasses, and organic matter are left uncovered in low states of the water, besides quantities of refuse in various forms appear upon the banks of the reservoir, river, and tributaries.

The water of condensation from the pumping station is discharged into the lower reservoir very near the intake pipe, from which water is drawn from the reservoir and pumped into the distribution.

The water of condensation heats the water near the intake very perceptibly and is therefore objectionable, as it hastens and favors decomposition of large quantities of organic matter which is to be found in this supply, particularly at this location.

The results of analyses of the supply made by this Board for three years show that the salt water of the bay finds its way into the lower reservoir, contaminating it to a high degree, and that the amount of organic matter present is in large quantities, as shown by the large quantities of ammonia reported present in the analyses.

It is the opinion of this Board that some immediate action should be taken to rectify the conditions existing, since the presence of animal fecal matter is a source of danger to the health of the consumers, and the presence of decaying vegetable matter and the introduction of salt water materially reduces its value as a potable or drinking water.

As a matter of precaution and safety, you are recommended to boil all water used for culinary purposes taken from the Kickemuit supply.

Yours truly,

(Signed)

GARDNER T. SWARTS,

Secretary.

Upon receipt of the notification of the Board to the Bristol and Warren Water Works Company, the company instituted an examination of the water-shed and of the supply, through Dr. John L. Leal, of Paterson, N. J.

A thorough consideration of the conditions existing was given, and a comprehensive report submitted to the company, and copy of this report was forwarded to the Board, accompanied by the following letter:

BRISTOL & WARREN WATER WORKS,

DECEMBER, 1st, 1902.

Rhode Island State Board of Health,

Gardner T. Swarts, Secretary.

GENTLEMEN:—We hand you herewith a report upon the sanitary condition of the water supply of this company, of which we wrote you in our letter of October 10th.

This report was prepared by Dr. John L. Leal, and embodies the findings and

conclusions of Prof. J. H. Appleton, Prof. F. P. Gorham, and Dr. F. T. Fulton, who, as well as Dr. Leal, made a thorough examination of the water in question and its sources.

John L. Leal, M. D., of Paterson, N. J., A. B., A. M., Princeton; ex-health officer of Paterson, N. J. (for thirteen years); Sanitary Adviser of the East Jersey Water Company (the largest water company in America) and of the Montclair and of the New York & New Jersey Water Companies; President, New Jersey State Sanitary Association, etc., etc., is, we feel, an expert who, you will agree with us, is entirely competent to pass upon the subject in hand. Of the fitness of Professors John Howard Appleton and F. P. Gorham of Brown University, and of Dr. F. T. Fulton of the Rhode Island Hospital, all of whom must be professionally known to your board, there can likewise be no question.

Their findings conclusively establish, as Dr. Leal states in closing his report, that the conditions of the water and the water sheds "do not in any way justify the action of the State Board of Health."

We therefore request that your Board shall, in justice to ourselves and in the interest of those who take our water, withdraw as promptly as may be its recent recommendation to the town of Bristol, and take such other steps as will, so far as possible, undo the effect caused by the unwarranted attack made by your Board in its action of October 3rd, upon the sanitary quality of the water and the water sheds of this company.

Respectfully,

GEORGE H. NORMAN,

President.

No meeting of the Board was held during 1902. Consideration of the condition of the Bristol water supply was taken up at the first meeting in the following year, 1903.

A CASE OF LEPROSY IN THE STATE.

October 3, 1902.

At the meeting of the Board held October 3, 1902, the Secretary reported that a case of leprosy of the anæsthetic type had been discovered at the R. I. Hospital. The man was a resident of Providence, and had been for several years. Had resided for many years in Brazil, and had come to this country again five years ago. Some of

the symptoms date back three or more years, but the disease had not been diagnosed as leprosy until the present time. He was admitted to the hospital on account of the presence of two ulcers, located at the base and plantar surface of each great toe. The legs had been œdematous, but the swelling had subsided upon retaining the recumbent position for several days, and the ulcers showed a tendency to heal kindly.

The face had the deep tan peculiar to residents of a tropical climate, but the lips and skin of the face had a thickened appearance; and the speech was clumsy, as if the tongue was thickened. The patient stated that the thickening of the skin had been gradual for a number of years, but the speech was the same as he had always had.

The chest and abdomen presented a spotted bronzed appearance with white areas, similar to a vitiligo. There was loss of sensation to pain, though not to touch, involving the forearms and hands and the feet and lower legs as far as the middle third. The patient appeared normal in every other way, the functions not being disturbed. The mind had been sluggish in action a few years ago, but had improved lately. This was attributed to the heat of the southern climate, and to the habits of the patient. Examination of the secretions from the nose, made by the hospital interne who had diagnosed the case, revealed the presence of typical bacilli of leprosy in large numbers. A section of the skin taken from the anæsthetic portion of the leg by the pathologist also showed numerous bacilli isolated and in clumps. The patient had asked for discharge from the hospital, and had departed without address, but had probably gone to New York; hence no consideration of the application of isolation or quarantine became necessary.*

*NOTE.—From anonymous communications received later, it was surmised that the patient had located somewhere in the northeastern part of Pennsylvania, but the exact location could not be ascertained.

ACTION TAKEN IN REFERENCE TO THE PRESENCE OF BUBONIC
PLAGUE IN SAN FRANCISCO, CA.

November 21, 1902.

A meeting of the Board was held this day, Dr. Sprague, President, in the chair. Present also Drs. Darrah, Briggs, and Mr. Locke, and Dr. Swarts.

A resolution of the Conference of State and Provincial Boards of Health of North America, passed at the meeting held in New Haven, Conn., on October 28 and 29, was taken up for consideration, and the following action was taken.

"Whereas, Information having been received through the action of the Conference of State and Provincial Boards of Health of North America, at its meeting in New Haven, October 28-29, 1902, that plague had existed in California since March, 1900, to October, 1902, and has continued to exist up to the present time, and from evidence submitted it appears that an effort is being made to suppress knowledge of its existence and efforts to restrict the disease have been held in abeyance by the health and State authorities of California, and

"Whereas, Information that this disease has been discovered outside the centre of infection, known as "Chinatown" in San Francisco, and

"Whereas, There is danger at any moment that this disease may be transported into other States, thereby placing those States in danger; therefore

"Be it Resolved, That this Board expresses its lack of confidence in the methods of control of the disease known as "plague," which may be present in San Francisco, and deplores the unusual and unsanitary method of suppressing knowledge of the presence of communicable disease, and that the safety of other States requires some immediate action for the control and suppression of the disease; and be it further

"Resolved, That the State Board of Health of Rhode Island hereby makes request of the Surgeon General, U. S. P. H. & M. H. S., to take such immediate action as may be possible for the prevention of dissemination of this disease, and in accordance with the resolution of

the Conference of State and Provincial Boards of Health of North America, to arrange at the earliest possible date a joint conference for the purpose of eradicating plague from the United States; and be it further

“Resolved, That the Secretary be directed to forward a copy of these resolutions to the Surgeon General, U. S. P H. & M. H. S., and to the several boards of health of the United States.”

The Secretary was appointed delegate to attend any meeting or meetings which might be called in connection with this matter.

ADDITIONS TO THE LIBRARY, 1902.

Agricultural Experiment Station, 11th Annual Report.....	
Alabama, Transactions of Medical Association of the State.....	1902
Baltimore, Md., Annual Report of Department of Public Safety.....	1901
Befolknigstatistik (32) Mouvement de la Population en.....	1900
Berlin, Ctreifs und Unspferrungen.....	1900
Berlin, Statistisches Jahrbuch de Stadt.....	1899
Boston, Mass., Annual Report of the Health Department.....	1901
Brighton, Eng., Annual Report of Health of Borough of.....	1901
Brookline, Mass., Report of the Board of Health.....	1901
Bureau of Animal Industry, U. S., Annual Report.....	1900
Butler Hospital, Report Presented at the 58th Annual Meeting.....	
Cambridge, Mass., Report of the Board of Health.....	1901
Canada, Report of Department of Agriculture.....	1901
Chili, Memoria de la Seccion De Hombres, Correspondiente al Ano, 1901, Por El Doctor Jaaquin Castro Soffia.....	
Chili, Memoria de la Seccion De Myeres, Correspondiente al Ano, 1901, Por El Doctore Octavio Echeгойen.....	
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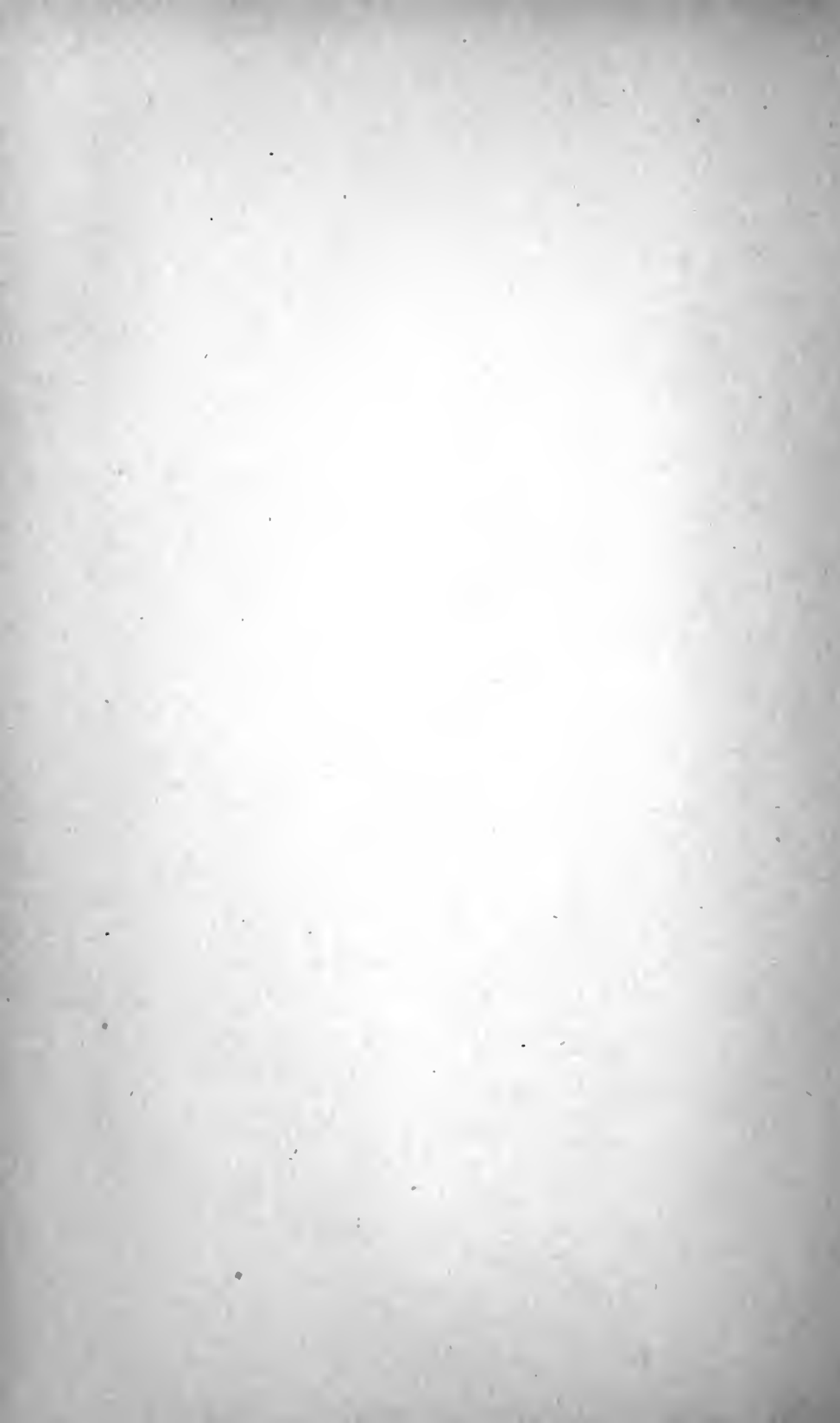
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FORTY-NINTH REPORT

RELATING TO THE

REGISTRY AND RETURN

OF

Births, Marriages, and Deaths,

AND OF DIVORCE,

IN THE

STATE OF RHODE ISLAND,

FOR THE

YEAR ENDING DECEMBER 31, 1901.

PREPARED BY

GARDNER T. SWARTS, M. D.,

STATE REGISTRAR OF VITAL STATISTICS; SECRETARY OF THE STATE BOARD OF HEALTH;
COMMISSIONER OF PUBLIC HEALTH.

PROVIDENCE

E. L. FREEMAN & SONS, STATE PRINTERS.

1903.

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OF THE

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 GARDNER T. SWARTS, M. D PROVIDENCE..... PROVIDENCE COUNTY.

GARDNER T. SWARTS, *Secretary*.

State of Rhode Island and Providence Plantations.

PROVIDENCE, R. I., February 1, 1903.

To the Honorable the General Assembly:

The forty-ninth Annual Report upon the Registration of Births, Marriages, and Deaths in Rhode Island, and including judicial procedure in relation to divorce, during the year 1901, with compendary tables of the results of registration in the previous years, is herewith respectfully submitted.

The plan of the preceding years, in regard to the general arrangement of the tables, summaries, and comments, has been followed in this report, except that Table IX of the yearly report of causes of deaths has been re-adjusted to conform to the nomenclature of the so-called Bertillon system.

In the special tables the object has been to present the important facts of many years of registration, as well as of single years, in such manner as to make them readily apparent and relieve the reader of the statistics of much of the labor of personal examination of each of the general tables of the preceding reports for the purpose of ascertaining the relation the various facts bear to each other.

While this classification does not reach a perfection which may be desired by all registrars, it has been adopted in order that it may be in conformity with the registration reports of all other principal cities and States having a system of registration. It also places the report in conformation with the registration reports of Canada and other foreign countries, which have agreed to adopt this system at this time.

Respectfully,

GARDNER T. SWARTS,

State Registrar.

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REPORT UPON THE REGISTRATION
OF
BIRTHS, MARRIAGES, AND DEATHS
IN
RHODE ISLAND,
FOR
THE YEAR ENDING DECEMBER 31, 1901,
AND
FOR VARIOUS YEARS FROM 1853 TO 1901,
INCLUSIVE.

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TABLE I.

General Summary of Births and Marriages in the State of Rhode Island during the year 1901.

TOWNS AND DIVISIONS OF THE STATE.	BIRTHS.							MARRIAGES.				
	Whole Number.	SEX.		PARENTAGE.				Whole Number.	NATIVITY.			
		Males.	Females.	Native.	Foreign.	Native Father. Foreign Mother.	Foreign Father. Native Mother.		Native.	Foreign.	Native Groom. Foreign Bride.	Foreign Groom. Native Bride.
Barrington.....	41	27	14	9	26	5	1	9	3	3	1	2
Bristol.....	142	70	72	41	66	17	18	31	16	4	4	7
Warren.....	147	91	56	29	88	16	14	53	11	26	4	12
BRISTOL COUNTY.....	330	188	142	79	180	38	33	93	30	33	9	21
Coventry.....	160	82	78	78	59	9	14	25	24	.....	.....	1
East Greenwich.....	44	24	20	18	17	2	7	25	21	3	1	.....
West Greenwich.....	9	3	6	9	.....	.....	.....	1	1	.....	.....	.....
Warwick.....	758	414	344	153	425	69	111	206	67	89	28	22
KENT COUNTY.....	971	523	448	258	501	80	132	257	113	92	29	23
Jamestown.....	20	10	10	14	4	.....	2	6	3	.....	1	2
Little Compton.....	25	14	11	13	10	1	1	5	4	.....	1	.....
Middletown.....	34	16	18	7	25	2	.....	3	2	1	.....	.....
NEWPORT CITY.....	576	307	269	230	242	53	51	165	72	47	29	17
New Shoreham.....	13	8	5	10	.....	2	1	13	12	.....	1	.....
Portsmouth.....	54	32	22	24	28	.....	2	6	5	1	.....	.....
Ptverton.....	60	36	24	21	25	8	6	14	2	5	7	.....
NEWPORT COUNTY.....	782	423	359	319	334	66	63	212	100	54	39	19
Burrillville.....	130	71	59	32	61	14	23	51	27	8	8	8
CENTRAL FALLS.....	516	293	223	91	303	48	74	154	37	71	19	27
Cranston*.....	286	148	138	121	118	19	28	47	28	8	7	4
Cumberland.....	238	124	114	66	102	37	33	83	33	22	13	15
East Providence.....	276	126	150	127	97	24	28	92	69	8	6	9
Foster.....	21	8	13	21	.....	1	2	4	4	.....	.....	.....
Glocester.....	23	10	13	19	1	1	2	7	6	.....	.....	1
Johnston.....	117	55	62	30	76	3	8	8	1	6	1	.....
Lincoln.....	265	135	130	23	167	32	43	57	10	28	11	8
North Providence.....	43	19	24	9	27	2	5	6	2	.....	1	3
North Smithfield.....	50	30	20	19	22	5	4	12	7	1	2	2
PAWTUCKET.....	1,019	509	510	315	438	141	125	375	170	101	58	46
PROVIDENCE CITY.....	4,696	2,483	2,213	1,369	2,482	420	425	1,875	846	614	206	209
Scituate.....	53	22	31	42	5	2	4	15	11	.....	2	2
Smithfield.....	39	21	18	18	17	2	2	23	14	5	2	2
WOONSOCKET.....	988	536	452	179	604	92	113	287	110	106	34	37
PROVIDENCE COUNTY.....	8,760	4,590	4,170	2,481	4,520	842	917	3,096	1,375	978	370	373
Charlestown.....	17	8	9	12	.....	4	1	4	3	.....	.....	1
Exeter.....	4	1	3	4	.....	.....	.....	7	7	.....	.....	.....
Hopkinton.....	42	16	26	34	2	.....	6	20	18	.....	1	1
Narragansett.....	14	9	5	9	4	.....	1	10	8	1	.....	1
North Kingstown.....	75	40	35	59	9	5	2	28	27	.....	1	.....
South Kingstown.....	99	53	46	72	5	13	9	34	28	3	1	2
Richmond.....	23	9	14	20	3	.....	7	7	7	.....	.....	.....
Westerly.....	175	84	91	79	71	15	10	78	53	14	7	4
WASHINGTON COUNTY.....	449	220	229	289	94	37	29	188	151	18	10	9

* State institutions not included.

TABLE I.—Continued.

General Summary of Deaths in the State of Rhode Island during the year 1901.

DEATHS.												
Whole Number.	SEX.		NATIVITY.		AGES GIVEN.		AGGREGATE AGE IN YEARS.		AVERAGE AGE IN YEARS.		Aggregate Ages.	Average Age.
	Males.	Females.	Native.	Foreign.	Males.	Females.	Males.	Females.	Males.	Females.		
25	10	15	19	6	9	15	433	938	48.11	62.53	1,371	57.12
121	68	53	84	37	68	53	2,665	2,702	53.90	50.98	6,367	52.62
94	47	47	66	28	47	47	1,684	1,419	35.83	30.19	3,103	33.01
240	125	115	169	71	124	115	5,782	5,059	46.63	43.99	10,841	45.36
114	53	61	90	24	53	61	2,207	2,947	41.64	48.31	5,154	45.21
56	29	27	48	8	29	27	1,413	1,089	48.72	40.33	2,502	44.68
6	4	2	6	.....	4	2	244	98	61.00	49.00	342	57.00
425	205	220	316	109	205	220	6,110	7,221	29.80	32.82	13,331	31.37
601	291	310	460	141	291	310	9,974	11,355	34.27	36.63	21,329	35.49
14	6	8	11	3	6	8	271	330	45.17	41.50	601	42.93
19	11	8	18	1	11	8	499	345	45.36	43.13	844	44.42
14	8	6	12	2	8	6	418	245	52.25	40.83	663	47.36
386	186	200	287	99	186	200	6,784	8,781	36.47	43.91	15,565	40.32
14	6	8	13	1	6	8	111	300	18.50	37.50	411	29.36
31	17	14	28	3	17	14	595	522	35.00	37.29	1,117	36.03
69	38	31	52	17	38	31	1,167	1,134	30.71	36.58	2,301	33.35
547	272	275	421	126	272	275	9,845	11,657	36.19	42.39	21,502	39.31
96	47	49	68	28	47	49	1,873	1,555	39.85	31.73	3,428	35.71
300	148	152	189	111	148	151	3,276	4,313	22.14	28.56	7,589	25.88
194	108	86	157	37	108	86	3,839	3,778	35.55	43.93	7,617	39.26
143	71	72	86	57	70	72	2,321	2,780	33.16	38.61	5,101	35.92
162	83	79	135	27	83	79	2,635	3,255	31.75	41.20	5,890	36.36
25	15	10	25	.....	15	10	854	722	56.93	72.20	1,576	63.04
30	17	13	28	2	17	13	924	676	54.35	52.00	1,600	53.33
57	30	27	42	15	30	27	1,396	980	46.53	42.61	2,376	41.68
148	66	82	98	50	66	82	1,389	2,417	21.05	29.48	3,806	25.78
46	19	27	34	12	19	27	539	1,017	28.37	37.67	1,556	33.83
37	25	12	24	13	25	12	877	533	35.08	44.42	1,410	38.11
667	321	346	425	242	321	346	11,857	13,249	35.38	58.29	24,606	36.89
3,444	1,793	1,651	2,402	1,042	1,793	1,651	60,995	61,149	34.02	37.04	122,144	35.47
83	42	41	76	7	42	41	1,809	1,483	43.07	36.17	3,292	39.66
28	17	11	25	3	16	11	529	416	33.06	37.82	945	35.00
479	235	244	319	160	235	244	5,423	6,973	23.08	28.58	12,396	25.88
5,939	3,037	2,902	4,133	1,806	3,035	2,901	100,036	105,296	32.96	36.30	205,332	34.59
19	12	7	16	3	12	7	657	395	51.75	56.43	1,052	55.36
15	7	8	15	.....	7	8	415	529	59.29	66.13	944	62.93
48	26	22	41	7	26	22	1,201	1,029	46.19	46.77	2,230	46.46
17	12	5	15	2	12	5	640	304	53.33	60.80	944	55.53
72	35	37	64	8	35	36	1,579	1,926	44.86	53.50	3,496	49.24
82	42	40	74	8	42	40	1,963	1,857	46.74	46.43	3,820	46.59
26	9	17	22	4	9	16	397	1,049	44.11	65.56	1,446	55.62
115	55	60	90	25	55	60	2,676	2,960	48.65	49.33	5,636	49.01
394	198	196	337	57	198	194	9,519	10,019	48.08	51.80	19,568	49.92

TABLE I.—Continued.—RECAPITULATION.

General Summary of Births and Marriages in the State of Rhode Island during the year 1901.

COUNTIES.	BIRTHS.							MARRIAGES.				
	Whole Number.	SEX.		PARENTAGE.				Whole Number.	NATIVITY.			
		Males.	Females.	Native.	Foreign.	Native Father. Foreign Mother.	Foreign Father. Native Mother.		Native.	Foreign.	Native Groom. Foreign Bride.	Foreign Groom. Native Bride.
BRISTOL	330	188	142	79	180	38	33	93	30	33	9	21
KENT	971	523	448	258	501	80	132	257	113	92	29	23
NEWPORT	782	423	359	319	334	66	63	212	100	54	39	19
PROVIDENCE	8,760	4,590	4,170	2,481	4,520	842	917	3,096	1,375	978	370	373
WASHINGTON	449	220	229	289	94	37	29	188	151	18	10	9
STATE INSTITUTIONS. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
WHOLE STATE	11,292	5,944	5,348	3,426	5,629	1,063	1,174	3,846	1,769	1,175	457	445

TABLE I.—Concluded.—RECAPITULATION.

General Summary of Deaths in the State of Rhode Island, by Counties, during the year 1901.

DEATHS.												
Whole Number.	SEX.		NATIVITY.		AGES GIVEN.		AGGREGATE AGE IN YEARS.		AVERAGE AGE IN YEARS.		Aggregate Ages.	Average Age.
	Males.	Females.	Native.	Foreign.	Males.	Females.	Males.	Females.	Males.	Females.		
240	125	115	169	71	124	115	5,782	5,029	46.63	43.90	10,811	45.36
601	291	310	460	141	291	310	9,974	11,355	34.27	36.63	21,329	35.49
547	272	275	421	126	272	275	9,845	11,657	36.19	42.39	21,502	39.31
5,939	3,037	2,902	4,132	1,807	3,035	2,901	100,036	105,296	32.96	36.30	205,332	34.59
394	198	196	337	57	193	194	9,519	10,049	48.08	51.80	19,568	49.92
245	143	102	135	110	143	102	7,089	4,979	49.57	48.81	12,068	49.26
7,966	4,066	3,900	5,654	2,312	4,063	3,897	142,245	148,365	35.01	38.07	290,610	36.51

TABLE II.—BIRTHS, 1901.

Arranged by Months, Sexes, and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.									
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.
January.....	Males....	498	16	46	8	36	51	24	54	209	34	20
	Females..	454	9	44	8	24	54	18	35	201	47	14
	Total....	952	25	90	16	60	105	42	89	410	81	34
February.....	Males....	453	11	31	14	24	56	21	40	182	54	20
	Females..	406	13	30	4	29	62	17	44	145	40	22
	Total....	859	24	61	18	53	118	38	84	327	94	42
March.....	Males....	499	19	58	10	24	62	26	25	210	40	25
	Females..	441	17	37	2	17	63	17	46	184	35	23
	Total....	940	36	95	12	41	125	43	71	394	75	48
April.....	Males....	453	16	33	6	20	69	17	46	175	47	24
	Females..	402	9	31	6	16	51	14	36	182	36	21
	Total....	855	25	64	12	36	120	31	82	357	83	45
May.....	Males....	456	11	39	13	27	52	32	35	175	55	17
	Females..	386	11	28	7	28	50	22	44	148	32	16
	Total....	842	22	67	20	55	102	54	79	323	87	33
June.....	Males....	462	15	37	10	25	63	23	42	187	41	19
	Females..	453	11	27	4	22	77	22	41	193	34	22
	Total....	915	26	64	14	47	140	45	83	380	75	41
July.....	Males....	506	18	53	7	27	63	27	46	213	35	17
	Females..	503	12	60	8	16	64	17	54	221	32	19
	Total....	1,009	30	113	15	43	127	44	100	434	67	36

TABLE II.—BIRTHS.—Concluded.

Arranged by Months, Sexes, and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.									
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.
August.....	Males....	562	18	45	13	30	69	31	49	243	43	21
	Females..	494	15	37	12	21	69	18	53	207	37	25
	Total....	1,056	33	82	25	51	138	49	102	450	80	46
September....	Males....	511	13	44	8	23	73	21	47	219	54	9
	Females..	434	10	41	13	24	70	19	45	164	40	8
	Total....	945	23	85	21	47	143	40	92	383	94	17
October.....	Males....	501	21	40	5	18	82	22	29	218	45	21
	Females..	447	8	36	9	16	78	14	43	187	36	20
	Total....	948	29	76	14	34	160	36	72	405	81	41
November....	Males....	523	16	51	11	19	61	23	52	234	45	11
	Females..	446	16	41	10	33	75	19	37	171	33	11
	Total....	969	32	92	21	52	136	42	89	405	78	22
December....	Males....	520	14	46	11	34	68	26	44	218	43	16
	Females..	482	11	36	7	23	59	26	32	210	50	28
	Total....	1,002	25	82	18	57	127	52	76	428	93	44
Whole Year..	Males....	5,944	188	523	116	307	769	293	509	2,483	536	220
	Females..	5,348	142	448	90	269	772	223	510	2,213	452	229
	Total....	11,292	330	971	206	576	1,541	516	1,019	4,696	988	449

TABLE IV.—MARRIAGES, 1901.

Arranged by Months and Divisions of the State.

MONTHS.	Whole State, 1901.	DIVISIONS OF THE STATE.										Whole State, 1900.
		Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	
January.....	339	7	26	3	15	32	16	30	162	26	22	326
February.....	287	9	19	2	7	27	15	32	135	27	14	308
March.....	125	2	7	5	4	14	1	15	66	6	5	129
First Quarter.....	751	18	52	10	26	73	32	77	363	59	41	763
April.....	392	10	16	4	21	40	19	40	193	34	15	331
May.....	254	7	24	...	5	32	12	21	123	17	13	255
June.....	517	14	34	3	20	49	19	52	256	49	21	527
Second Quarter.....	1,163	31	74	7	46	121	50	113	572	100	49	1,113
July.....	294	6	15	5	16	44	4	25	148	18	13	277
August.....	264	9	20	3	13	26	11	20	138	17	7	281
September.....	343	10	14	3	13	48	15	24	160	36	20	394
Third Quarter.....	901	25	49	11	42	118	30	69	446	71	40	952
October.....	375	11	26	7	24	34	17	44	178	20	14	409
November.....	444	6	37	4	21	45	21	51	207	28	24	434
December.....	212	2	19	8	6	14	4	21	109	9	20	265
Fourth Quarter.....	1,031	19	82	19	51	93	42	116	494	57	58	1,108
Whole Year.....	3,846	93	257	47	165	405	154	375	1,875	287	188	3,936

TABLE V.—DEATHS, 1901.

Arranged by Months, Sexes, and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.											State Institutions.
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.		
January.....	Males	381	7	30	8	9	52	16	28	175	26	16	14	
	Females...	361	10	29	7	15	44	15	25	166	18	18	14	
	Total.....	742	17	59	15	24	96	31	53	341	44	34	28	
February.....	Males	333	10	28	4	14	53	10	20	138	21	29	6	
	Females...	343	10	34	2	10	49	16	35	140	17	22	8	
	Total.....	676	20	62	6	24	102	26	55	278	38	51	14	
March	Males	384	13	27	6	20	56	13	34	171	12	21	11	
	Females...	377	4	33	9	15	42	14	41	163	18	26	12	
	Total.....	761	17	60	15	35	98	27	75	334	30	47	23	
April.....	Males	328	12	21	7	16	43	12	20	147	10	24	16	
	Females...	310	3	20	2	24	52	15	27	130	14	15	8	
	Total.....	638	15	41	9	40	95	27	47	277	24	39	24	
May.....	Males	331	9	24	3	18	49	9	24	148	19	14	14	
	Females...	265	13	18	5	15	31	6	14	114	26	16	7	
	Total.....	596	22	42	8	33	80	15	38	262	45	30	21	
June.....	Males	279	9	13	5	7	37	8	21	127	20	12	20	
	Females...	248	7	21	9	18	35	3	20	103	18	9	5	
	Total.....	527	16	34	14	25	72	11	41	230	38	21	25	
July.....	Males	372	9	16	13	20	47	8	32	176	27	16	8	
	Females...	360	11	30	8	9	51	21	24	152	32	10	12	
	Total.....	732	20	46	21	29	98	29	56	328	59	26	20	

TABLE V.—DEATHS, 1901.—Concluded.

Arranged by Months, Sexes, and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.										
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	State Institutions.
August	Males	360	19	36	9	18	39	12	32	152	23	10	10
	Females...	375	8	27	7	20	53	11	40	156	23	23	7
	Total.....	735	27	63	16	38	92	23	72	308	46	33	17
September...	Males	360	8	35	11	16	42	16	31	162	14	11	14
	Females...	335	9	29	8	22	47	10	32	140	22	11	5
	Total.....	695	17	64	19	38	89	26	63	302	36	22	19
October.....	Males	327	7	21	5	22	35	17	26	147	23	16	8
	Females...	321	15	21	4	16	36	13	33	142	12	19	10
	Total.....	648	22	42	9	38	71	30	59	289	35	35	18
November...	Males	284	11	20	6	19	44	8	25	113	15	13	10
	Females...	297	17	27	8	18	30	17	27	114	20	12	7
	Total.....	581	28	47	14	37	74	25	52	227	35	25	17
December....	Males	327	11	20	9	7	43	19	28	137	25	16	12
	Females...	308	8	21	6	18	39	11	28	131	24	15	7
	Total.....	635	19	41	15	25	82	30	56	268	49	31	19
Whole Year..	Males	4,066	125	291	86	186	540	148	321	1,793	235	198	143
	Females...	3,900	115	310	75	200	509	152	346	1,651	244	196	102
	Total.....	7,966	240	601	161	386	1,049	300	667	3,444	479	394	245

TABLE VI.—DEATHS, 1901.

Exhibiting the Whole Number, the Proportion to Population, and Number of each Sex, in every Town and Division of the State.

TOWNS AND DIVISIONS OF THE STATE.	Total Deaths.	Population, 1901, geometrically estimated.	Deaths per 1,000 of population.	DEATHS.	
				SEX.	Number of each sex.
Barrington	25	1,111	22.5	Males.....	10
				Females	15
Bristol	121	7,090	17.1	Males.....	68
				Females	53
Warren	94	5,195	18.1	Males.....	47
				Females	47
BRISTOL COUNTY	240	13,396	17.9	Males.....	125
				Females	115
Coventry.....	114	5,324	21.4	Males.....	53
				Females	61
East Greenwich	56	2,754	20.3	Males.....	29
				Females	27
West Greenwich.....	6	592	10.1	Males.....	4
				Females	2
Warwick	425	21,802	19.5	Males.....	205
				Females	220
KENT COUNTY	601	30,472	19.7	Males.....	291
				Females	310
Jamestown.....	14	1,622	8.6	Males.....	6
				Females	8
Little Compton.....	19	1,137	16.7	Males.....	11
				Females	8
Middletown	14	1,497	9.4	Males.....	8
				Females	6
NEWPORT CITY	386	22,403	17.2	Males.....	186
				Females	200
New Shoreham.....	14	1,410	9.9	Males.....	6
				Females	8
Portsmouth	31	2,130	14.6	Males.....	17
				Females	14

TABLE VI.—DEATHS, 1901.—Continued.

Exhibiting the number of Deaths in each Period of Life, in every Town and Division of the State.

PERIODS OF LIFE.																
Under 1 year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Age unstated.
1	...	...	...	...	1	...	...	1	...	...	2	1	2	1	...	1
...	1	...	...	...	...	...	...	1	...	1	2	4	2	4	...	...
6	1	1	...	...	...	1	...	4	6	3	7	18	12	9	...	...
4	1	...	...	1	2	1	1	3	4	8	3	8	8	6	3	...
17	2	...	1	...	...	...	1	4	1	...	2	6	5	7	1	...
15	2	1	3	...	...	2	1	4	2	1	3	5	5	2	1	...
24	3	1	1	...	1	1	1	9	7	3	11	25	19	17	1	1
19	4	1	3	1	2	3	2	8	6	10	8	17	15	12	4	...
11	3	2	...	3	2	...	1	...	...	1	3	9	17	1	...	...
7	4	2	...	...	2	...	1	1	4	3	10	7	10	9	1	...
3	1	...	...	...	...	...	...	...	5	5	3	3	6	3	...	...
4	...	...	...	...	2	1	3	1	2	3	4	1	4	2	...	...
...	...	...	...	...	...	...	...	...	1	...	...	3	...	...	...	...
...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
64	15	6	2	...	2	6	4	9	12	20	22	15	17	11	...	...
59	8	5	5	6	4	2	6	17	13	17	22	21	16	16	3	...
78	19	8	2	3	4	6	5	9	17	27	28	30	40	15	...	...
70	12	7	5	6	8	3	10	19	20	23	36	29	31	27	4	...
2	...	...	...	...	...	...	...	...	...	...	2	...	1	...	1	...
1	...	...	...	...	1	...	...	2	...	1	...	1	...	2	...	...
2	...	...	...	...	1	...	...	1	...	...	1	3	3	...	...	...
...	1	...	1	...	...	...	...	2	...	...	1	...	2	1	...	...
...	...	...	...	...	...	...	...	...	1	2	2	3	...	...	...	...
1	...	...	...	1	...	...	1	...	...	...	1	...	1	1	...	...
34	5	5	1	1	2	3	15	16	15	21	20	19	15	13	1	...
33	6	2	3	...	4	3	6	17	10	13	19	26	34	21	3	...
2	...	1	...	...	...	...	...	1	1	...	1	...	...	...	...	...
...	2	...	1	...	...	...	1	...	...	1	...	...	2	1	...	...
3	...	1	1	...	...	1	...	3	1	1	2	...	3	...	1	...
2	2	...	1	...	...	...	...	2	1	1	...	1	4	...	...	...

TABLE VI.—DEATHS, 1901.—Continued.

Exhibiting the Whole Number, the Proportion to Population, and Number of each Sex, in every Town and Division of the State.

TOWNS AND DIVISIONS OF THE STATE.	Total Deaths.	Population, 1901, geometrically estimated.	Deaths per 1,000 of population.	DEATHS.	
				SEX.	Number of each sex.
Tiverton.....	69	3,003	23.0	Males.....	38
				Females....	31
NEWPORT COUNTY.....	547	33,202	16.5	Males.....	272
				Females....	275
Burrillville.....	96	6,375	15.1	Males.....	47
				Females....	49
CENTRAL FALLS.....	300	18,585	16.1	Males.....	148
				Females....	152
Cranston.....	194	11,630	16.7	Males.....	108
				Females....	86
Cumberland.....	143	8,970	15.9	Males.....	71
				Females....	72
East Providence.....	162	12,533	12.9	Males.....	83
				Females....	79
Foster.....	25	1,135	22.0	Males.....	15
				Females....	10
Glocester.....	30	1,403	21.4	Males.....	17
				Females....	13
Johnston.....	57	3,918	14.5	Males.....	30
				Females....	27
Lincoln.....	148	9,015	16.4	Males.....	66
				Females....	82
North Providence.....	46	3,115	14.8	Males.....	19
				Females....	27
North Smithfield.....	37	2,345	15.8	Males.....	25
				Females....	12
PAWTUCKET.....	667	40,435	16.5	Males.....	321
				Females....	346
PROVIDENCE CITY.....	3,444	180,355	19.1	Males.....	1,793
				Females....	1,651

TABLE VI.—DEATHS, 1901.—Continued.

Exhibiting the number of Deaths in each Period of Life, in every Town and Division of the State.

PERIODS OF LIFE.																Age unstatd.
Under 1 year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	
14 7	4 1	.... 1	.... ....	.... ....	.... 1	1 ....	.... ....	4 2	1 4	2 4	.... 4	3 2	4 3	5 1	.... 1	........
57 44	9 12	7 3	2 6	1 1	3 6	5 3	15 8	25 25	19 15	26 20	28 25	28 30	26 46	18 27	3 4	........
11 7	3 4	1 2	1 2	.... ....	1 ....	.... ....	.... 3	2 5	3 10	2 3	4 4	9 5	7 2	3 2	........	........
52 43	10 5	6 4	5 5	1 1	8 6	2 2	4 4	13 18	3 6	11 14	12 11	12 18	5 10	4 4	.... ....	.... 1
19 11	6 3	3 2	3 2	3 1	2	2 3	4	9 4	8 12	9 8	9 5	9 11	13 19	9 5	........	........
10 11	6 6	2 2	2 ....	.... ....	4 2	4 2	.... 1	6 6	5 9	5 3	7 7	11 7	7 11	1 2	.... 3	1
17 19	3 2	3	1	4 1	3	2 1	4 2	6 6	4 5	11 6	7 7	4 11	9 11	5 7	.... 1	........
2 ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	1 1	1 ....	.... ....	2	2 3	5 1	1 4	1 1	........
2 3	2 ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... 1	2 2	4 2	6 4	.... ....	1 1	........
5 9	.... 1	.... ....	.... ....	1 ....	.... ....	.... ....	.... 1	3	3 2	2 5	4	3 3	6 4	3 ....	.... 2	........
28 17	4 5	.... 2	2 3	2 2	3 5	1 2	2 3	4 5	3 11	2 6	4 5	6 6	4 7	1 2	.... 1	........
6 7	1	1 ....	.... ....	1	1 ....	.... ....	.... 2	1 2	1 1	.... 1	3 3	2 7	1 2	1 1	........	........
2 2	1 1	1 ....	.... ....	.... ....	2 ....	.... ....	1	6 2	2 1	2 1	2	3 1	3 3	.... ....	.... 1	........
81 69	9 8	7 5	4 5	4 3	8 14	2 2	8 4	21 36	21 24	26 28	32 38	53 50	31 39	12 20	2 1	........
387 332	105 94	33 23	20 20	17 16	40 37	25 17	46 38	172 149	158 148	193 138	213 185	183 186	137 149	57 103	7 16	........

TABLE VI.—DEATHS, 1901.—Continued.

Exhibiting the Whole Number, the Proportion to Population, and Number of each Sex, in every Town and Division of the State.

TOWNS AND DIVISIONS OF THE STATE.	Total Deaths.	Population, 1901, geometrically estimated.	Deaths per 1,000 of population.	DEATHS.	
				SEX.	Number of each sex.
Scituate	83	3,364	24.7	Males.....	42
				Females	41
Smithfield	28	2,061	13.6	Males.....	17
				Females	11
WOONSOCKET.....	479	28,931	16.5	Males.....	235
				Females	244
PROVIDENCE COUNTY..	5,939	334,170	17.8	Males.....	3,037
				Females	2,902
Charlestown.....	19	985	19.3	Males.....	12
				Females	7
Exeter.....	15	834	18.0	Males.....	7
				Females	8
Hopkinton.....	48	2,589	18.5	Males.....	26
				Females	22
Narragansett.....	17	1,542	11.0	Males.....	12
				Females	5
North Kingstown.....	72	4,147	17.4	Males.....	35
				Females	37
South Kingstown.....	82	5,080	16.1	Males.....	42
				Females	40
Richmond.....	26	1,498	17.4	Males.....	9
				Females	17
Westerly	115	7,652	15.0	Males.....	55
				Females	60
WASHINGTON COUNTY	394	24,327	16.2	Males.....	198
				Females	196
<hr/>					
STATE INSTITUTIONS	245	2,321	105.6	Males.....	143
				Females	102

TABLE VI.—DEATHS, 1901.—Continued.

Exhibiting the number of Deaths in each Period of Life, in every Town and Division of the State.

PERIODS OF LIFE.															
Under 1 year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.
7	3	1	....	....	1	....	1	1	2	2	8	8	4	4	....
10	1	....	1	....	1	....	1	8	2	4	1	1	5	6	....
5	....	....	....	1	1	1	....	....	....	2	1	....	5	....	1
3	....	....	....	....	1	....	1	....	1	1	1	....	1	1	1
97	14	5	6	1	6	6	3	17	13	17	11	14	17	7	1
65	22	2	8	5	8	2	7	15	24	15	17	18	24	10	2
731	167	63	44	35	80	45	73	262	227	284	321	323	260	108	12
608	152	42	46	29	75	31	67	257	256	234	286	329	292	167	30
...	1	....	....	....	1	....	....	1	1	....	1	3	2	....	2
...	....	1	....	....	....	....	....	1	....	....	1	2	....	1	1
...	....	....	....	....	....	....	....	1	....	....	3	....	2	1	....
...	....	....	....	....	....	....	....	....	1	....	1	....	3	3	....
1	....	....	....	....	3	1	2	1	2	2	3	6	4	1	....
2	1	....	....	....	1	1	....	1	1	2	1	10	2	....	....
1	1	....	....	....	....	....	1	....	....	2	1	1	2	2	1
...	....	....	....	....	....	....	....	1	....	....	2	....	1	1	....
5	1	....	....	....	....	....	1	2	2	7	5	6	4	2	....
5	1	....	....	....	....	1	....	2	2	4	2	4	6	5	4
8	1	1	....	2	....	....	1	....	3	3	2	7	6	7	1
6	2	1	....	....	....	....	2	4	4	1	2	3	7	6	2
...	....	1	....	....	1	....	....	....	1	2	....	3	1	....	....
...	....	....	....	....	....	....	....	2	....	2	1	1	5	5	1
8	2	....	....	....	2	....	....	2	2	7	8	8	10	5	1
11	1	....	....	....	1	2	....	1	4	3	7	11	8	9	2
23	6	2	....	2	7	1	5	7	11	23	23	34	31	18	5
24	5	2	....	....	2	4	2	11	13	12	17	31	32	30	9
...
1	1	....	....	1	....	1	7	15	16	35	22	22	19	5	....
...	....	....	....	....	....	....	2	4	12	20	15	19	22	6	....

TABLE VI.—DEATHS, 1901.—Continued.

(RECAPITULATION.)

Exhibiting the Whole Number, the Proportion to Population, and Number of each Sex, in every Division of the State.

DIVISIONS OF THE STATE.	Total Deaths.	Population, 1901, geometrically estimated.	Deaths per 1,000 of population.	DEATHS.	
				SEX.	Number of each sex.
BRISTOL COUNTY	240	13,396	17.9	Males.....	125
				Females	115
KENT COUNTY	601	30,472	19.7	Males.....	291
				Females	310
NEWPORT COUNTY.....	547	33,202	16.5	Males.....	272
				Females	275
PROVIDENCE COUNTY.....	5,939	334,170	17.8	Males.....	3,037
				Females	2,902
WASHINGTON COUNTY	394	24,327	16.2	Males.....	198
				Females	196
STATE INSTITUTIONS.....	245	2,321	105.6	Males.....	143
				Females	102
WHOLE STATE	7,966	437,888	18.2	Males.....	4,066
				Females	3,900

TABLE VI.—DEATHS, 1901.—Concluded.

(RECAPITULATION.)

Exhibiting the number of Deaths in each Period of Life, in every Division of the State.

	PERIODS OF LIFE.															Age unstated.
	Under 1 year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.
24	3	1	1	....	1	1	1	9	7	3	11	25	19	17	1	1
19	4	1	3	1	2	3	2	8	6	10	8	17	15	12	4	...
78	19	8	2	3	4	6	5	9	17	27	28	30	40	15	....	...
70	12	7	5	6	8	3	10	19	20	23	36	29	31	27	4	...
57	9	7	2	1	3	5	15	25	19	26	28	28	26	18	3	...
44	12	3	6	1	6	3	8	25	15	20	25	30	46	27	4	...
731	167	63	44	35	80	45	73	262	227	284	321	323	260	108	12	2
608	152	42	46	29	75	31	67	257	256	234	286	329	292	167	30	1
23	6	2	....	2	7	1	5	7	11	23	23	34	31	18	5	...
24	5	2	....	....	2	4	2	11	13	12	17	31	32	30	9	2
...	....	....	....	1	....	1	7	15	16	35	22	22	19	5	....	...
1	1	....	....	....	....	....	2	4	12	20	15	19	22	6	....	...
913	204	81	49	42	95	59	106	327	297	398	433	462	395	181	21	3
766	186	55	60	37	93	44	91	324	322	319	387	455	438	269	51	3

TABLE VII.—CAUSES OF DEATH, 1901.

Arranged Alphabetically; showing the Number of each Sex who died from each cause, in each month and in the whole year 1901; also the Number of Native-born and Foreign-born, and also the Number of Native and of Foreign Parentage, from each cause, for the year.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.
Abscess, Alveolar.....																									1	1	1	1	1	1
Brain.....																									1	1	1	1	1	1
Cervical Glands.....																									1	1	1	1	1	1
Liver.....																									1	1	1	1	1	1
Lumbar.....																									1	1	1	1	1	1
Lungs.....																									1	1	1	1	1	1
Mastoid.....																									1	1	1	1	1	1
Neck.....																									1	1	1	1	1	1
Ovary.....																									1	1	1	1	1	1
Pelvis.....																									1	1	1	1	1	1
Psoas.....																									1	1	1	1	1	1
Rectum.....																									1	1	1	1	1	1
Scrotum.....																									1	1	1	1	1	1
Sub-Lingual Gland.....																									1	1	1	1	1	1
Tonsil.....																									1	1	1	1	1	1
Internal.....																									1	1	1	1	1	1
Accidents, Asphyxia.....	1	3	2	2	1	4	2	1	1	1	1	1	1	2	2	1	1	1	1	1	2	5	3	23	10	11	22	22	11	11
Bicycle.....																									2	2	2	2	3	1
Burns and Scalds.....	1	2	2	3	2	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1	4	4	1	27	9	10	26	14	22	22

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Accidents, Drowning.	4	1	1	6	1	1	1	5	7	1	1	1	1	1	2	7	2	1	1	6	1	1	1	1	40	17	17	40	54	3	
Electric Car.				1			2						1		1		1		2				1	3	7	1	9	9	1		
Elevator.															2				1				1	3	1	3	1	3	1	4	...
Exposure.	1	5	3	3			2												1			2	2	8	6	7	7	13	1		
Falls.	1	3	2	2	3	1	4	1	2	1	2	1	2		7	2	6	5	3	1	3	5	3	34	26	21	39	41	19		
Firearms.			1														2		1			1		4	1	4	1	5	...		
Insolation.											4	3	2	9	1									23	14	12	25	25	12		
Poison.	1	1	2	2			1						2											5	1	3	3	5	1		
Lead.																			1					1	1		2	2	...		
Railroad.	1	1	1	1	1	1	4		6	1	1	1	1	5	1	3					2	1	3	19	14	13	20	29	4		
Various.	3	4	4	4	1	3	3		4	1	6	2	4	1	4	6	3	1			3	1		29	18	19	28	43	4		
Alcoholism.	1	1	1	1	1	9	3		1		2	1	4	1	1	2	1	3			3		15	20	11	24	30	5			
Delirium Tremens.	1	2			2																		4	1	2	3	5	...			
Anemia.	1	1	1	1	1			2	2	1	1	2	1	1	2	1				1		2	12	3	8	7	7	8			
Pernicious.	1	1					2		1		1				1						1		6	1	6	1	1	6			
Aneurism of Aorta.	1	1					1																1	3	1	3	3	1			
Angina Pectoris.	2	4	2	2	2	1	2	1	2	1	2	1			2	1	1	2	1			2	22	8	20	10	17	13			
Apoplexy and Paralysis.	10	18	8	15	18	15	16	8	12	15	11	14	15	5	11	9	16	13	16	12	17	12	12	186	130	169	147	136	180		
Apoplexy, Pulmonary.																							2	...	2	...	2	...	1	1	
Appendicitis.	1	1		2	1	3	5	1	2		2	3	3	4	1	1	3	2	2			33	9	27	15	28	14				
Arthritis.																	1						1	1	1	1	1	...	2		
Asthma.																							4	8	2	10	8	4			
Atelectasis Pulmonum.	2	1			2	1	1															2	12	...	7	5	5	7			
Atheroma of Arteries.																							4			4	...	3	1		

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.	
Brain Diseases*																															
Congestion	1	1					2		2	1		1				1									2		1			2	
Softening	1	1	1	1	1	1			1							1	2	1	2		1				7	7	6	8	10	4	
Inflammation																	1				1			2			1	1	2		
Bronchitis, Acute	16	9	16	4	14	13	11	8	11	11	2	3	1	1			3	4	8	5	11	9	2	9	136	25	59	102	85	76	
Chronic	1	3	2	4	4	11	5	6	1	2	1	1	2	1	1	1	1	4	6	2	3	3	1	6	32	39	29	42	26	45	
Calculi, Renal					1																		2		2	1	2	1	3		
Cancer of Abdominal Viscera.	1								1		1		1	1	2				1		1		2		4	6	4	6	4		
Bladder.			1								1				1		1	1							4	1	4	1	3	2	
Brain and Skull											1														1					1	
Breast	1	4		4	3	6			4		3		4			5	3		8		1		1	1	31	12	29	14		43	
Cæcum.																									1		1			1	
Colon																1							1		1	2		2		2	
Duodenum																			1								1			1	
Ear.	1										1													1	1	1	1	1	1	1	
Face.																									1	1	1	1	1	1	
Hand	1	2						1			1					1	2		1	2		1	1	8	4	6	6	9	3		
Inguinal Gland																										1		1	1		
Intestine					1	1		1		1		2	1	1	1	1	1	1	3		3		1	2		2		2	13	1	
Jaw.	1								1		1																3	2	1		
Larynx.																															
Leg.	1																														
Lip.	1																														
Liver	2	3	2	4	2	4		2	2		2	2		3		3	1	2	2	1	1		2	22	20		18	24	16	26	

Not otherwise placed.

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.		
Cancer of Lung									1																1	1			2	1	1	
Lymphatic Glands.																													1	1	1	
Mastoid.		1											1															1	1	1	1	
Mediastinum								1																				1	1	1	1	
Neck.												1																1	1	1	1	
Esophagus											1																	2	2	2	2	
Omentum										1				1														1	1	1	1	
Ovary.	1																	4										1	4	1	4	
Pancreas	1									1																		1	2	1	2	
Peritoneum									1																			1	1	1	1	
Pylorus										1																		3	3	3	3	
Rectum	1	1	1	4					1	1			1			1	2											8	5	6	7	
Side														1														1	1	1	1	
Sigmoid Flexure.											1																	2	2	1	1	
Sternum	1																												1	1	1	
Stomach	4	2	1	2	5	3	3	1	5	3	5	6	2	1	1	1	2	2	2	1	4	6		28	34	23	39	25	37	25	37	
Throat.																2	1	1	1									4	1	2	3	
Tongue									1																			1	1	1	1	
Uterus.	6	3		7	4	4								6	7	4	5	5										30	22	26	26	
Cancerum Oris.	1																1											2	1	1	1	
Carbuncle																													1	1	1	1
Cellulitis, Pelvic									1			1			1		1											2	1	1	2	
Cerebritis									1																			1	1	1	1	
Childbirth*	1	1	1	2							1							3	2	1								5	6	1	10	

* Not otherwise placed.

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.	
Debility, Difficult Labor.																								1	...	...	1	1	...	
Injury at Birth												1												2	...	2	...	...	2	
Premature Birth	13	5	10	6	8	5	3	4	10	9	3	3	6	1	9	13	6	4	6	4	7	7	9	11	162	...	63	99	90	72	
Dermatitis, Hemorrhagic																								1	...	1	1	
Diarrhea										1	...				1	1	1	5	1	...	...	...	...	3	7	1	9	2	8	
Chronic	1	...	1	...	1	...	1	...	1	...	1	...	1	...	2	...	1	1	...	...	...	...	...	5	6	5	6	4	7	
Diabetes	2	...	2	3	2	3	1	1	2	...	3	...	2	1	3	1	2	1	2	1	23	8	20	11	13	18	
Mellitus	5	3	...	2	3	4	2	2	...	2	1	1	2	2	1	3	3	...	2	2	1	3	4	35	15	28	22	25	25		
Diphtheria	7	8	5	6	5	8	3	2	4	2	9	3	4	4	2	4	...	5	2	5	9	8	5	3	106	7	45	68	55	58	
Membranous Croup	5	4	3	...	3	5	2	3	2	1	1	1	1	2	3	...	3	2	3	4	10	2	1	3	61	3	22	42	37	27	
Dysentery	2	1	2	1	...	...	...	...	2	1	1	1	6	4	10	13	8	11	5	4	3	...	...	54	21	29	46	37	38	
Eczema																	1	...	...	...	...	...	...	1	...	...	1	1	...	
Elephantiasis	1	...																						1	...	1	1	
Embolism, Arterial							1	...	1	...	1	...	1	...	1	...	1	...	...	...	1	...	...	2	3	1	4	2	3	
Cerebral									1	1	...	1	2	1	...	5	...	3	2	2	3	
Emphysema	2	...													1	...	...	...	...	...	...	...	1	3	1	2	2	3	1	
Empyema																	2	...	...	...	...	...	...	2	2	1	3	1	3	
Endarteritis							1	...	1	...	1	1	1	1	...	1	
Endocarditis	3	4	9	3	4	3	3	5	2	2	3	6	4	5	5	3	7	4	4	5	1	5	7	2	52	47	31	68	52	47	
Endometritis																	1	...	...	...	...	...	...	...	...	...	1	...	1	
Enteritis (under 2 years)	5	3	2	4	1	2	...	2	1	1	2	1	10	5	5	4	8	4	10	9	3	4	2	84	6	36	54	49	41		
Gastro (under 2 years)	3	3	2	1	2	3	...	2	1	12	5	11	8	6	5	5	7	3	...	2	1	82	...	26	56	50	32	
Enteritis (over 2 years)	1	2	4	...	1	...	1	2	5	5	7	6	5	7	3	3	...	1	1	3	31	26	14	43	27	30	
Gastro (over 2 years)					1	1	1	1	...	1	1	1	3	2	2	9	3	...	...	3	1	3	1	16	18	9	25	13	21	

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Am.	For.	Am.	For.	M.	F.		
Epilepsy.....	1	2	2	1	4	1	3	1	2	1	2	1	1	1	1	5	1	1	1	1	1	1	1	1	19	5	8	16	16	8		
Erysipelas.....					1				1															2	...	2	...	2	...			
Face.....				1	1	1																		3	2	1	4	1	4	1		
Neck.....			1				1		1															1	2	1	2	...	...	3
Fever, Malarial.....	1	1	1		1		1		1		1		1		1	1	1	1	1	1	2	1	1	9	4	4	9	6	7			
Malaria.....	1						1		1		1		2		1		2		1		1	1	1	8	2	3	7	5	5			
Typhoid.....	5	5	1	3	7	1	6		2	2	3	2	3	3	3	5	7	5	9	5	4	4	12	6	57	46	34	69	62	41		
Fibroid of Uterus.....	2						1				2		2		1		2		1		1	1	3	6	8	4	10	...	14			
Fistula in Ano.....																					1	1	1	1	...	1	...	1	...	1		
Gallstones.....					1				1							1				1	1	1	2	2	2	1	3	...	...	4
Gangrene of Arm.....																							1	1	...	1	...	...	1	...
Back.....	1																						1	1	...	1	...	...	1	...
Foot.....	2	1					1							1					1					4	2	4	2	4	2	4	2	
Genitals.....									1															1	...	1	...	1	...	1		
Leg.....																1			1				2	...	2	...	2	...	...	2
Lung.....					1																			...	1	...	1	...	1	...		
Senile, Unspecified.....	1								1									1					...	2	1	2	1	2	1	2	1	
Gastritis.....	2	1	1				3	1	2	2	3	3	3	4	5	4	9	3	1	1	3	2	4	27	28	22	33	22	33	22	33	
Hæmatemesis.....	2	1																				1	1	3	2	2	3	2	3	2	3	
Heart Diseases*.....	10	18	10	17	19	16	8	11	11	7	8	13	9	13	12	12	13	7	15	10	13	12	10	9	174	109	134	149	138	145	138	145
Enlargement.....														1										1	...	1	...	1	...	1	...	
Fatty Degeneration.....	2				2	2	1		3	4	2					1		1	1	2	1	1	1	14	8	11	11	11	11	11	11	
Hypertrophy.....	2				1		3	3	1					1				1	1	1	1	1	1	8	7	6	9	7	8	7	8	
Valvular Disease.....	11	13	6	10	7	10	5	14	6	5	6	8	11	6	6	8	6	7	12	8	9	7	10	111	91	84	118	95	107	95	107	

* Not otherwise placed.

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT AGE.		SEX.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.
Hemiplegia.....			1		1		1				1				1						1		2	8	1	7	2	3	6	
Hemophilia.....			1	2					1		1													5		1	4	1	4	
Hemorrhage, Cerebral.....	14	13	10	6	5	5	6	10	4	7	4	10	2	5	7	4	5	5	8	7	10	11	7	7	95	77	75	97	82	90
Intestinal.....																						1			1		1			
Umbilical.....	1	1							1														1	4		3	1	2	2	
Hepatitis.....			1	1							2				1		1				1			3	4	3	4	3	4	
Hernia.....	2		1	2			1	2	1						1	1	1	1	1	2	1	2	8	11	6	13	11	8		
Femoral.....															1										1		1		1	
Inguinal.....	1	1	1						1	1		1	1		1									4	3	2	5	5	2	2
Umbilical.....							1		1								1				1			2	2	1	3	1	3	
Ventral.....	1																1							1	1		2		2	
Hip-joint Disease.....	1																							1		1		1	1	
Homicide.....	1						1		2				1									1		5	2	2	5	4	3	3
Hydrocephalus.....	1		2								1		1									1	1	7		2	5	3	4	4
Icterus Neonatorum.....	1		4	1	2	1	1	1	1	1	1	2					1	2				1	1	19		6	13	15	4	7
Indigestion, Acute.....	2						2	1					1	2	2	1		1			1	2	5	2	7	10	10	7		
Infantile.....	3	1	2	2	2	4	1	5	2	3		3	5	7	3	1		3	1		2	1	51	2	24	29	33	20		
Influenza.....	19	19	29	9	18	2	11	2	7	1	2						1				3	3	1	100	46	79	67	55	91	
Intestinal Obstruction.....	1		1	2	2		2	2	1						2	1	1				1		1	8	9	4	13	10	7	
Ulceration.....	1						1		1						1									3	1	3	1	2	2	
Insanity*.....	3	1	1	2			1	1		2					1	1	1	1	1	2	1		2	1	9	9	4	14	12	6
Dementia.....			1														1							1		2	3	1	4	2
Mania, Acute.....	1	1		1											1		1							3	2	2	3	3	3	2
Chronic.....									1															1		1			1	1

* Not otherwise placed.

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.	
Insanity, Melancholia.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	3	1	2	2	1	3
Intussusception.....	..	..	..	..	2	1	1	..	2	1	1	..	..	..	1	2	1	..	..	..	..	..	..	13	3	5	11	8	1	8
Kidney Diseases*.....	..	..	..	..	..	3	..	..	..	..	..	1	..	..	..	1	..	..	1	..	..	..	..	3	3	1	5	1	5	1
Amyloid Degeneration.....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Bright's Disease.....	7	9	9	11	15	11	8	8	14	4	7	10	3	1	7	6	7	3	5	6	6	3	4	5	11	57	85	84	92	77	
Acute.....	3	1	1	..	1	..	..	..	1	..	1	..	1	..	1	..	..	..	1	1	1	1	1	8	5	5	8	9	4	4
Nephritis, Acute.....	3	..	2	1	..	1	2	2	..	1	2	2	1	2	1	4	2	3	..	4	1	2	1	2	23	13	6	30	22	14	
Chronic.....	10	10	7	9	8	15	18	8	7	9	10	11	18	16	11	9	6	9	14	14	12	9	163	97	118	142	131	129	..	..
Uremia.....	..	2	3	1	1	1	1	1	1	..	1	..	..	..	1	1	1	1	1	1	1	1	1	12	5	6	11	4	13	4
Laryngitis.....	3	1	..	3	2	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1	1	12	1	5	8	9	4	4
Leukemia.....	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	1	..	..	4	..	2	2	2	2	2
Liver Diseases*.....	1	..	1	..	1	1	1	1	1	1	1	1	1	1	2	..	4	4	4	4	4	7	1	1
Atrophy, Acute, Yellow.....	..	..	1	..	..	..	..	..	..	..	..	..	1	1	1	1	..	..	1	..	..	1	..	4	2	1	5	2	4	4
Cirrhosis.....	1	1	3	2	3	2	3	3	2	2	3	3	3	3	4	..	5	3	1	3	..	3	5	2	31	29	15	45	33	27	4
Congestion.....	1	..	..	..	1	..	..	..	..	..	..	1	1	1	1	1	1	..	..	..	1	1	1	5	2	1	6	3	4	4
Hypertrophy.....	..	1	1	1	1	1	1	1	1	1	1	2	2
Inflammation.....	1	1	..	1	2	..	2	..	2	..	1	1	1
Locomotor Ataxia.....	..	..	..	..	2	2	1	..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	4	8	5	9	4	4
Lymphatic Glands, Affections of.....	1	1	..	1	1	1	1	1
Malassimilation.....	6	2	5	4	4	6	8	3	10	8	7	6	8	7	14	15	23	16	18	13	3	3	11	8	206	2	87	121	117	91	..
Malformations*.....
Abdominal Viscera.....	1	2	1	3	..	2	1	2	1	1
Acephalus.....	..	1	1	1	..	1	..	1	1	1	1	1
Foramen Ovale.....	2	1	1	..	2	1	1	1	1	1	1	1	..	3	2	5	2	2	..	24	..	14	10	14	10	10

* Not otherwise placed.

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.																																
Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.				
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.			
Malformations, Head.....																																
1										1														2			2	2	...			
		1					1	1																5			2	3	2	3		
Palate, Fissure of.....																																
																	1							1			1	...	1	...		
Spina Bifida.....																																
1		1								1			3		1		1		1		1		2		12		6	6	3	9		
Occipital Bone.....																																
																								1			1	1	...			
Imperforate Anus.....																																
				1				1		1														4		3	1	3	1	...		
Throat.....																																
				1																			1		2		...	2	...			
Mastoiditis.....																																
												1												1			1	...	1	...		
Measles.....																																
2		1						2		1													1	12		3	3	12	10	5	...	
Meningitis.....																																
5	6	7	7	13	9	6	7	2	3	6	6	8	10	12	9	8	6	6	7	8	5	5	150	16	60	106	80	86	10	17	13	14
Cerebro-Spinal.....																																
3		1		1	1	1			2	2	1	2	2	1	2	2	2	2	2	2	2	2	21	6	10	17	13	14		
Spinal.....																																
1	3	1	2		3			1				3	1		3	1	2	1	1	1	1	2	24	2	11	15	13	13		
Myelitis.....																																
		1					3	1	1			2	1		1	1						7	6	4	9	7	6	...	...	
Myocarditis.....																																
		1	1												1							3	5	3	5	4	4	...	...	
Myxoedema.....																																
				1																		1		1		1	...	1	...			
Necrosis of Femur.....																																
		1																				1		1		1	...	1	...			
Metatarsal Bone.....																																
																	1					1		1		1	...	1	...			
Skull.....																																
		1																				1		1		1	...	1	...			
Neurasthenia.....																																
																	1		1			2		2		2	2	...		
Neuritis, Multiple.....																																
		1		1																			2		2		2	...	1	1		
Old Age.....																																
7	10	6	15	1	6	8	11	11	8	3	13	9	13	10	3	8	12	6	14	6	16	139	71	137	73	81	129	...	...	
Debility, Senile.....																																
2		4	1	2		1					3		3		2				2			8	12	7	13	1	19	...	...	
Dementia, Senile.....																																
1		1													1							3	1	3	1	1	3	...	...	
Otitis Media.....																																
				1								2										2		2		2	1	3		

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.	
Paraplegia.....	1																								2	...	2	...	2	...	
Paresis.....	1										3	1	1				1		1						7	1	6		7	1	
Parotitis.....				1																					1	...	1	...	1	...	
Pemphigus.....																				1					1	...	1	...	1	...	
Pericarditis.....	1	1	1		2	1	1	2	1	1			2	3			1	1	1	1	1	1			11	6	7	10	10	7	
Peritonitis.....	1	1			2	...	...	...	1	3	1	3	1	3			...	...	...	1	2	4			13	7	8	12	6	14
Pertussis.....	1	1	1	1	3	1	1	3	1	2	1	1	1	1	1	1	1	1	1	1	1	1			17	...	9	8	6	11	
Phlebitis.....									1																1	1	...	2	1	1	1
Pleurisy.....	1	1	2	2	3	1	1	1	1	1	1	1	1			2	1	1	1	1	...	...			16	4	12	8	9	11
Pneumonia.....	61	48	66	57	54	46	53	46	35	28	22	9	10		9	9	11	14	16	14	23	29	40	42	518	224	324	418	400	342	
Pott's Disease.....								1	1														2	...	1	1	1	2	...
Prostate Disease.....	3	...	3	...	2	...	2	...	3	...	2	...	1				2	...	...	...	2	...	...	...	14	8	13	9	22	...
Purpura Hemorrhagica.....	1				1												1	1	1	1	1	1	1	2	...	...	...	2	1	1
Pyelonephritis.....							1									1	1	1	1	1	1	1	1	3	1	2	2	3	1	1	
Pyosalpinx.....							1							1		1	1	1	1	1	1	1	1	4	...	3	1	...	4	...	
Rachitis.....																		1							1	...	1	...	1	...	
Rheumatism, Acute.....	1	2			2	...	1	1	1	1	2				2	...	2	...	1	1	1	2	3	9	11	3	17	4	16	...	
Chronic.....	1								2	...	2	...	1	1	1	1	1	...	1	1	1	1	1	6	3	6	3	4	5	...	
Sarcoma of Arm.....																			1					...	1	...	1	1	1	...	
Chest.....					1																			1	...	1	...	1	...	1	...
Clitoris.....									1															1	...	1	...	1	...	1	...
Jaw.....																	1							1	1	1
Liver.....																								1	...	1	...	1	1
Lung.....								1														1	2	1	1	...

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.	
Sarcoma of Neck.....																									1		1		1		
Scapula.....								1																	1		1			1	
Throat.....																										1					
Uterus.....			1																						1		1			1	
Multiple.....																									1		1			1	
Osteo. of Femur.....			1																						1		1			1	
Scarlet Fever.....					1		2	3	2	2				1	1	2									20	1	9	12	10	11	
Sclerosis, Arterial.....			2		4		1		2	1															6	5	6	5	1	10	
Spinal.....					1		1									1								3	1		4	1	3		
Scorbutus.....																1								1		1			1		
Scrofula.....					1								1												2	2	1	3	3	1	
Septicæmia.....			1		1		1		1															1	2		3		3		
Small-pox.....	1	1									1	1												1	4		5	3	2		
Spinal Cord, Disease of*.....																															
Spleen, Enlargement.....																															
Stenosis, Mitral.....																															
Stomach, Ulceration.....	1		1	1			1						1	1											1		1		1		
Stricture, Oesophagus.....																									7	1	6	2	6	2	
Suicide by Cutting Throat.....												1	3	1			2	1						6	6	4	8	9	3		
by Drowning.....																															
by Hanging.....											1																				
by Illuminating Gas.....	2						3				1	2				3									3	4	3	4	6	1	
by Inhalation of Chloroform.....																									6	7	3	10	11	2	
by Shooting.....			1				1	1																	1	3	1	3	2	2	

* Not otherwise placed.

TABLE VII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.				
																									Am.		For.		M.		F.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.			
Suicide by Poison, Arsenic.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	1	...
Carbolic Acid.....	...	1	1	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	2	2	2	2	3	1	1	...
Morphine.....	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	2	...	2	...	1	1	1	...
Paris Green.....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	2	2	1	2	1	1	...
“Rough on Rats”.....	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...
Syphilis.....	1	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	1	1	...	...	...	...	2	5	1	6	5	4	2	7
Congenital.....	1	2	1	...	1	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	...	1	2	11	...	6	5	4	1	...
Tabes Dorsalis.....	1	1	1	1	1	1	7	...	5	2	1	2	1	...	
Mesenterica.....	1	1	1	1	1	1	1	1	2	1	2	1	1	1	...	
Thrombosis.....	1	1	1	1	1	1	1	1	1	1	1	1	1	...
Tonsilitis.....	1	3	3	...	2	1	1	...	
Trismus Nascentium.....	1	1	1	6	10	5	11	...	
Tubercular Enteritis.....	2	1	...	1	1	1	...	2	1	...	...	...	2	...	...	...	1	1	1	...	...	...	...	13	3	6	10	5	11	...	...
Laryngitis.....	...	1	...	...	...	...	2	...	...	...	...	...	1	...	...	1	1	1	...	...	...	...	...	2	5	1	6	4	3	...	...
Meningitis.....	1	2	1	...	5	2	3	4	2	2	3	1	1	4	2	8	4	2	2	1	1	1	1	51	5	23	33	32	24	...	...
Peritonitis.....	1	...	2	1	1	...	1	1	...	...	...	2	...	1	1	1	1	1	2	...	...	...	1	12	4	8	8	10	6	...	...
Tuberculosis of Abdominal Or- gans.....	1	1	...	1	...	1	1	...	
Hip-joint.....	1	1	...	1	1	4	...	3	1	3	1	
Knee-joint.....	1	1	...	1	
Liver.....	1	1	1
Mesenteric Glands.....	1	1	1	1	1	1	2
Pulmonary.....	34	40	32	35	49	41	45	30	43	37	33	33	33	34	32	26	28	21	29	41	33	41	50	24	518	326	238	606	441	403	
General.....	2	1	1	...	1	2	1	...	2	...	2	1	1	2	4	1	3	...	2	19	7	10	16	19	7

TABLE VII.—CAUSES OF DEATH, 1901.—Concluded.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.		
Tumor of Abdomen.....	1							1																3	...	1	2	1	2	2	1	
Brain.....	1				1	1							1											3	2	1	4	3	2	3	2	
Cerebellum.....																								1	...	...	1	1	...	1	1	
Liver.....					1																						1	...	1	...	1	1
Mesentery.....							1																	...	...	1	...	1	...	1	1	1
Neck.....																								1	...	...	...	1	1	...	1	...
Ovary.....	2	1			4							1	1		1	1	1							8	4	8	4	...	1	...	12	12
Ulcer, Rodent.....													1											1	...	1	...	1	...	1	1	1
Ulcer, Varicose.....									1																		1	...	1	...	1	...
Ulcerations, Numerous.....												1															1	...	1	...	1	...
Cause Unknown.....	2	2	4	1	1	2	3	3	2	1	4	4	1	1	1	1	4	1	1	1	4	...	1	1	33	8	12	29	23	18	18	

TABLE VIII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.																																	SEX.		TOTAL.
Under 1.		1 and under 2.		2 to 3.		3 to 4.		4 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.			
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.		F.
Accidents, Poison																																	M.	F.	6
Lead																																	M.	F.	2
Railroad																																	M.	F.	33
Various																																	M.	F.	47
Alcoholism																																	M.	F.	35
Delirium Tremens																																	M.	F.	5
Anemia																																	M.	F.	15
Pernicious																																	M.	F.	7
Aneurism of Aorta																																	M.	F.	1
Angina Pectoris																																	M.	F.	4
Apoplexy and Paralysis																																	M.	F.	30
Apoplexy, Pulmonary																																	M.	F.	180
Appendicitis																																	M.	F.	2
Arthritis																																	M.	F.	42
Asthma																																	M.	F.	2
Atelectasis Pulmonum																																	M.	F.	12
Atheroma of Arteries																																	M.	F.	4
Brain Diseases*																																	M.	F.	2
Congestion																																	M.	F.	10
Softening																																	M.	F.	14
Inflammation																																	M.	F.	2
Bronchitis, Acute																																	M.	F.	161
Chronic																																	M.	F.	71
Calculi, Renal																																	M.	F.	3
Cancer of Abdominal Viscera																																	M.	F.	10
Bladder																																	M.	F.	2
Brain and Skull																																	M.	F.	1
Breast																																	M.	F.	43

* Not otherwise placed.

TABLE VIII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 4.		4 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		SEX.		TOTAL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Erysipelas.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	...	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Face.....	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Neck.....	3	3	6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Fever, Malarial.....	1	2	7	13	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Malaria.....	1	1	2	5	5	10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Typhoid.....	62	41	103																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Fibroid of Uterus.....	3	14	14	28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Fistula in Ano.....</

* Not otherwise placed.

TABLE VIII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 4.		4 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age stated.		SEX.						
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
TOTAL.																																									
Hepatitis.....	1																																					3	4		
Hemia.....	2																																					11	8		
Femoral.....																																									
Inguinal.....																																									
Umbilical.....	1																																								
Ventral.....																																									
Hip-joint Disease.....																																									
Homicide.....	1																																								
Hydrocephalus.....	2	2	1																																						
Icterus Neonatorum.....	15	4																																							
Indigestion, Acute.....																																									
Infantile.....	29	17	4	3																																					
Influenza.....	6	8	1																																						
Intestinal Obstruction.....																																									
Ulceration.....																																									
Insanity*.....																																									
Dementia.....																																									
Mania, Acute.....																																									
Chronic.....																																									
Melancholia.....																																									
Intussusception.....	2	3																																							
Kidney Diseases*.....																																									
Amyloid Degeneration.....																																									
Bright's Disease.....	1	1																																							
Acute.....																																									
Nephritis, Acute.....	3	1	2																																						
Chronic.....	1	1																																							
Uremia.....																																									

* Not otherwise placed.

TABLE VIII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 4.		4 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		Total.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		M.	F.		
Laryngitis.....	1	2			2				1	3	1			1						1																		9	4	13	
Leukemia.....							1		1				1																									2	4	6	
Liver Diseases*.....																																							1	6	
Atrophy, Acute, Yellow.....					1																																		2	4	6
Cirrhosis.....																																							33	27	60
Congestion.....					1																																		3	4	7
Hypertrophy.....																																							...	2	1
Inflammation.....								1																															1	1	2
Locomotor Ataxia.....																																							9	4	13
Lymphatic Glands, Affections of.....																																							1	1	2
Malassimilation.....	110	83	7	8																																			117	91	201
Malformations*.....	2	1																																					2	1	1
Abdominal Viscera.....	1	1																																					1	1	2
Accephalus.....	1	1																																					1	1	2
Foramen Ovale.....	14	10																																					14	10	24
Head.....	2																																						2	3	5
Heart.....	2	3																																					2	3	5
Palate, Fissure of.....	1																																						1	1	2
Spina Bifida.....	3	9																																					3	9	12
Occipital Bone.....	1																																						3	1	4
Imperforate Anus.....	3	1																																					3	1	4
Throat.....	2																																						2	1	2
Mastoiditis.....																																							...	2	2
Measles.....	3	1	2	3	2		2																															10	5	15	
Meningitis.....	29	25	12	23	5	11	5	7	3	2	7	4	1	2	4	3	3																					80	86	166	
Cerebro-Spinal.....	2	3	3	2	2		1		2	1	1	1	1	1	2	1																							13	14	27
Spinal.....	7	4	2	1	2		3	1																																	

* Not otherwise placed.

TABLE VIII.—CAUSES OF DEATH, 1901.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 4.		4 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		TOTAL.		
	M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.						
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				M.	F.
Sarcoma of Arm.....																																							1
Chest.....																																							1
Clitoris.....																																							1
Jaw.....																																							1
Liver.....																																							1
Lung.....																																							1
Neck.....																																							1
Scapula.....																																							1
Throat.....																																							1
Uterus.....																																							1
Multiple.....																																							1
Osteo. of Femur.....																																							1
Scarlet Fever.....	1	3	2	1	1	2	2	1	2	2	1	2	1	2																								10	
Sclerosis, Arterial.....																																							1
Spinal.....																																							1
Scorbutus.....																																							1
Scrofula.....	1	1																																					3
Septicemia.....	1																																						3
Smallpox.....																																							3
Spinal Cord, Disease of*.....																																							1
Spleen, Enlargement.....																																							5
Stenosis, Mitral.....																																							2
Stomach, Ulceration.....																																							1
Stricture, Esophagus.....																																							6
Suicide by Cutting Throat.....																																							1
by Drowning.....																																							4
by Hanging.....																																							6
by Illuminating Gas.....																																							11
																																							2

* Not otherwise placed.

TABLE IX.—CLASSIFICATION AND PERCENTAGE, 1901.
Mortality in the State and in each Division ascribed to each Cause and Class of Causes.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.										CAUSES OF DEATH.										PERCENTAGE OF DEATHS IN WHOLE STATE.										PERCENTAGE OF DEATHS IN EACH DIVISION.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
										Whole State.										Percentage in Whole State.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	CAUSES OF DEATH.										Percentage in Whole State.										PERCENTAGE OF DEATHS IN EACH DIVISION.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

26	95	14	41	175	56	102	490	54	65	1,058	DISEASES OF THE RESPIRATORY APPARATUS.	13.28	16.50	11.27	42.48	15.29	18.07	13.52	10.02	8.70	15.81	10.83
38	107	30	47	175	53	114	611	143	47	1,305	DISEASES OF THE DIGESTIVE APPARATUS....	17.13	11.93	29.85	17.74	17.09	17.07	13.52	12.18	18.63	17.80	15.83
22	43	9	30	124	11	31	275	19	27	591	DISEASES OF THE GENITO-URINARY APPARATUS AND ITS ADJUNCTS.	7.42	6.85	3.96	7.98	4.05	3.67	9.58	7.77	5.59	7.15	9.17
.....	8	2	4	17	5	7	42	7	3	95	PUERPERAL STATE.....	1.19	.76	1.46	1.22	1.05	1.07	1.31	1.04	1.24	1.33	.....
.....	6	.....	.....	1	.....	1	14	2	4	23	DISEASES OF THE SKIN AND CELLULAR TISSUE.	.85	1.02	.42	.41	.15	.....	.08	.....	.....	1.00	.....
.....	1	.....	.....	2	.....	.....	2	1	1	7	DISEASES OF THE ORGANS OF LOCOMOTION..	.09	.25	.21	.06	.....	.....	.16	.....	.....	.17	.....
2	3	1	4	5	4	3	28	2	4	57	MALFORMATIONS.....	.72	1.02	.63	.81	.45	1.33	.39	1.01	.62	.50	.83
5	37	7	11	54	19	31	135	20	14	333	EARLY INFANCY.....	4.18	3.55	4.18	3.92	4.65	6.33	4.17	2.85	4.35	6.16	2.08
13	18	7	26	30	3	21	70	9	22	234	OLD AGE.....	2.94	5.58	1.88	2.21	3.15	1.00	3.01	6.73	4.35	2.99	5.42
15	29	9	11	74	9	27	196	19	19	408	AFFECTIONS PRODUCED BY EXTERNAL CAUSES.	5.12	4.82	3.97	5.69	4.05	3.00	5.72	2.85	5.59	4.83	6.25
1	3	.....	3	9	.....	3	19	2	2	42	ILL-DEFINED DISEASES.....	.53	.51	.42	.55	.45	.....	.70	.78	.....	.50	.42

TABLE IX.—CLASSIFICATION AND PERCENTAGE, 1901.—Continued.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.										PERCENTAGE OF DEATHS IN EACH DIVISION.									
Whole State.										Percentage in Whole State.									
Bristol County.	Kent County.	Newport Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	Bristol County.	Kent County.	Newport Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.
2	2	3	1	17	2	1	40	56	Alcoholism.....	.50	.25	.42	.49	.33	.03	.78	.33	.62	.33
..	..	1	..	..	..	..	2	57	Saturism.....	.03	..	..	..	..	.08	..	..	..	..
										II.									
										DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.									
..	2	..	..	..	..	..	3	60	Encephalitis.....	.04	..	..	.03	..	..	..	..	..	.33
5	20	7	17	31	16	19	57	17	3	192	3	192	3	192	3	192	3	192	3
1	2	2	2	5	15	..	27	61a	Meningitis, Simple.....	2.41	.76	3.55	1.66	2.83	5.33	2.40	4.40	4.35	3.33
..	2	..	..	..	..	..	13	62	Meningitis, Epidemic, Cerebro-Spinal.....	.34	..	..	.44	.75	.16	.52	..	..	.33
1	1	3	4	1	4	1	14	63	Locomotor Ataxia, Progressive.....	.16	..	..	.20	.15	.23	..	..	..	.33
1	1	1	1	1	1	1	30	63	Other Diseases of the Spinal Cord.....	.38	.53	.21	.44	.60	.33	.26	..	..	..
21	36	18	30	35	11	33	157	16	29	415	7.36	3.34	4.56	5.85	3.67	4.48	7.77	11.18	5.99
1	1	3	4	1	4	1	14	65	Cerebral Congestion and Hemorrhage.....	5.21	..	..	.12	.15	.31	.78	..	..	.17
5	9	3	1	6	6	31	13	66	Cerebral Softening.....	.18	..	..	..	..	..	..	..	..	.42
										Paralysis, without Specified Cause.....									
..	..	..	..	..	..	..	..	..	..	1.28	3.05	2.71	.90	2.00	.24	.26	1.86	1.53	2.08

TABLE IX.—CLASSIFICATION AND PERCENTAGE, 1901.—Continued.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.										PERCENTAGE OF DEATHS IN EACH DIVISION.											
										CAUSES OF DEATH.											
Bevillon Numbers.										Percentage in Whole State.											
Whole State.										Percentage in Whole State.											
Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	Causes of Death.	Percentage in Whole State.	Washington County.	Woonsocket.	Providence City.	Pawtucket.	Central Falls.	Providence County Towns.	Newport City.	Newport County Towns.	Kent County.	Bristol County.
..	..	..	..	1	..	..	2	..	8	Calculi of Urinary Tract.....	.04	..	..	.06	..	..	.08	..	..	..	..
..	2	1	4	1	1	1	13	1	24	Diseases of the Bladder.....	.30	.51	.21	.38	.15	..	.31	.26	..	.33	..
1	..	..	..	..	..	..	..	..	1	Diseases of Urethra.....	.01	..	..	..	..	..	..	..	..	..	.42
..	5	1	8	1	1	1	8	1	3	Diseases of Prostate.....	.28	.76	.21	.23	.15	..	.23	.26	..	.83	..
..	..	1	..	..	..	..	..	..	1	Non-Veneral Diseases of the Male.....	.01	..	..	..	..	..	..	.26	..	..	..
1	1	1	1	1	..	..	10	..	14	Tumor, Uterine.....	.18	..	..	.29	..	..	.08	..	.62	.17	.42
..	1	1	2	1	1	1	6	1	12	Cysts and other Tumors of Ovary.....	.15	.25	..	.17	.15	..	.16	.26	..	.17	..
..	1	1	3	..	..	..	5	..	10	Other Diseases of the Female Genital Organs.....	.13	..	..	.14	..	..	.23	.26	..	.17	..
VII.																					
THE PUERPERAL STATE.																					
..	..	2	2	..	..	..	4	..	8	Accidents of Pregnancy.....	.10	..	..	.12	..	..	.16	.52	..	..	..
..	2	1	5	1	1	..	8	3	22	Other Accidents of Labor.....	.28	.51	.63	.23	..	.33	.39	..	.62	.33	..

4	1	1	9	4	3	16	4	42	137	Septicæmia, Puerperal.....	.53	.84	.40	.45	1.33	.70	.36	.02	.66	.....
2	.....	1	1	4	12	.....	1	21	138	Albuminuria and Puerperal Eclampsia.....	.26	.35	.35	.60	.....	.08	.36	.....	.33	.....
.....	.....	.....	.....	.....	2	.....	2	140	Other Puerperal Accidents.....	.03	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....
VIII.																				
DISEASES OF THE SKIN AND CELLULAR TISSUE.																				
3	.....	.....	1	.....	6	.....	4	14	142	Gangrene.....	.18	1.02	.17	.....	.....	.08	.....	.....	.50	.....
1	.....	.....	.....	.....	1	.....	.....	2	143	Furuncle (Carbuncle).....	.03	.....	.03	.....	.....	.....	.....	.....	.17	.....
2	.....	.....	.....	.....	3	2	.....	7	144	Abscess (Warm).....	.09	.42	.09	.....	.....	.....	.....	.....	.33	.....
.....	.....	.....	.....	1	4	.....	.....	5	145d	Other Diseases of the Skin, etc.....	.06	.....	.12	.....	.....	.....	.....	.....	.....	.....
IX.																				
DISEASES OF THE ORGANS OF LOCOMOTION.																				
1	.....	.....	2	.....	.....	1	1	1	146	Affections of the Bones (non-tuberculous)...	.08	.25	.03	.....	.....	.16	.....	.....	.17	.....
.....	.....	.....	.....	.....	.....	1	.....	1	147	Arthritis and Other Affections of the Joints.....	.01	.....	.03	.....	.....	.....	.....	.....	.....	.....
X.																				
2	3	1	4	5	4	3	28	3	150	MALFORMATIONS.....	.72	1.02	.63	.81	.45	1.33	.39	1.04	.62	.50
XI.																				
EARLY INFANCY.																				
5	35	7	11	50	18	31	136	19	315	151	Congenital Debility.....	3.95	3.30	3.97	3.66	4.65	6.00	3.86	2.85	4.35
2	.....	.....	4	1	.....	9	1	1	152	Other Diseases of Early Infancy.....	.23	.25	.21	.26	.....	.33	.31	.....	.52	2.08

TABLE IX.—CLASSIFICATION AND PERCENTAGE, 1901.—Concluded.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.										PERCENTAGE OF DEATHS IN EACH DIVISION.																			
Bertillon Numbers.										CAUSES OF DEATH.																			
Whole State.										Percentage in Whole State.																			
Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	Woonsocket.	Providence City.	Pawtucket.	Central Falls.	Providence County Towns.	Newport City.	Newport County Towns.	Kent County.												
13	18	7	26	39	3	21	76	9	22	234	154	XII.					2.94	5.58	1.88	2.21	3.15	1.00	3.01	6.73	4.35	2.99	5.42		
												Old Age.																	
												XIII.																	
												AFFECTIONS PRODUCED BY EXTERNAL CAUSES.																	
	3				2	1	2	1	2	11	155	Suicide by Poison.....				.42	.03	.30	.33	.16						.50			
				1			4			5	156	Suicide by Asphyxia.....	.06				.12			.08									
2	4			2		1	4			13	157	Suicide by Hanging.....	.16				.12	.15		.16						.66	.83		
1		1		1	1	1	1	1	1	7	158	Suicide by Drowning.....	.09	.25		.21	.03	.15		.08					.62		.42		
	1		1	6	1	1	3	2		15	159	Suicide by Firearms.....	.19			.42	.09	.15	.33	.46	.26				.17				
					1	1	2			4	160	Suicide by Cutting Instruments.....	.05				.06		.33	.08									
4	15	5	6	20	5	11	83	7	7	163	166	Other Accidental Traumatisms.....	2.05	1.78	1.46	2.41	1.65	1.07	1.54	1.55	3.10	2.49	1.67						

2	1	7	1	3	19	3	36	167	Burns and Scalds.....	.45	.63	.56	.45	.33	.54	.62	.83
1	6	6	4	25	1	37	169	Insolation.....	.46	.21	.73	.60			.46		.42
1	8	8	4	4	1	14	170	Freezing (exposure to cold).....	.18	.25	.12				.63	.17	
4	4	16	3	14	2	57	172	Accidental Submersion.....	.72	2.03	.41	.45			1.23	1.04	1.67
1	2	2	1	26	1	33	174	Absorption of Deleterious Gases.....	.41	.25	.76	.15			.16		.42
1	1	1	1	4	1	6	175	Other Acute Poisonings.....	.08	.25	.12				.08		
1	1	1	1	6	1	7	175a	Homicide.....	.09		.17				.08		
XIV.																	
UNSPECIFIED AND ILL-DEFINED.																	
1	3	9	3	19	2	42	179	Cause unstated.....	.53	.51	.42	.45			.70	.78	.42

TABLE X.—*Bertillon.*

CAUSES OF DEATH.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
I.							
GENERAL DISEASES	592	902	748	836	935	1,115	926
II.							
DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE	130	161	182	185	221	223	217
III.							
DISEASES OF THE CIRCULATORY APPARATUS	29	40	66	44	71	72	65
IV.							
DISEASES OF THE RESPIRATORY APPARATUS	94	116	151	213	234	267	219
V.							
DISEASES OF THE DIGESTIVE APPARATUS	79	137	205	178	194	238	203
VI.							
DISEASES OF THE GENITO-URINARY APPARATUS AND ITS ADNEXA	10	8	13	12	25	21	20
VII.							
PUERPERAL STATE	12	9	15	24	21	31	25
VIII.							
DISEASES OF THE SKIN AND CELLULAR TISSUE	7	5	12	12	17	12	6
IX.							
DISEASES OF THE ORGANS OF LOCOMOTION	3	1	2	7	6	6	9
X.							
MALFORMATIONS	3	7	11	5	12	14	14
XI.							
EARLY INFANCY	10	34	63	33	52	62	56
XII.							
OLD AGE	58	67	84	76	119	114	117
XIII.							
AFFECTIONS PRODUCED BY EXTERNAL CAUSES	63	56	74	61	82	87	89
XIV.							
ILL-DEFINED DISEASES	160	185	220	356	336	354	304
TOTAL NUMBER OF DEATHS	1,250	1,728	1,846	2,042	2,325	2,616	2,270

TABLE X.—*Bertillon*.—Continued.

1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.
1,067	1,255	1,042	1,467	1,480	1,655	1,250	1,101	1,065	1,433	1,278	1,199	1,404	1,635	1,635	1,482	1,504	1,874	1,888
245	287	281	282	296	286	291	320	277	320	342	379	446	512	484	454	444	471	492
76	112	115	103	128	99	117	116	117	130	123	148	190	193	220	192	173	192	173
272	282	251	314	341	302	292	264	265	280	288	341	379	390	414	591	530	417	523
336	287	285	277	351	316	275	285	292	301	383	347	628	508	505	549	476	513	395
22	28	24	34	23	24	24	43	37	40	41	52	75	80	83	75	66	93	80
22	26	27	35	37	31	31	34	34	37	44	52	45	46	60	53	48	46	43
21	29	16	17	18	21	21	29	21	14	19	28	24	30	29	29	35	23	30
5	15	8	9	7	5	5	6	12	11	15	5	11	18	15	16	27	15	10
15	13	11	13	8	10	12	17	16	15	14	15	17	15	17	15	11	26	32
73	85	76	81	74	93	77	90	70	58	91	73	131	219	196	155	97	94	88
116	132	143	161	193	152	178	188	206	217	204	232	233	254	223	216	241	213	322
135	108	107	125	116	103	132	122	115	122	139	125	143	156	150	171	153	162	159
281	268	255	289	288	308	253	274	385	404	257	348	518	347	248	319	311	311	397
2,686	2,927	2,591	3,207	3,360	3,405	2,970	2,889	2,912	3,382	3,238	3,344	4,247	4,403	4,229	4,317	4,116	4,450	4,441

TABLE X.—*Bertillon*.—Continued.

CAUSES OF DEATH.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
I.							
GENERAL DISEASES.....	1,830	1,879	1,829	1,729	1,809	1,800	1,851
II.							
DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.....	534	571	609	630	660	671	658
III.							
DISEASES OF THE CIRCULATORY APPARATUS	209	243	274	256	336	294	361
IV.							
DISEASES OF THE RESPIRATORY APPARATUS	514	574	565	558	648	597	764
V.							
DISEASES OF THE DIGESTIVE APPARATUS.....	381	487	508	672	608	690	613
VI.							
DISEASES OF THE GENITO-URINARY APPARATUS AND ITS ADNEXA.....	98	111	97	111	184	167	208
VII.							
PUERPERAL STATE	45	51	60	50	60	51	47
VIII.							
DISEASES OF THE SKIN AND CELLULAR TISSUE	32	18	39	24	32	46	43
IX.							
DISEASES OF THE ORGANS OF LOCOMOTION.....	20	15	11	25	26	32	34
X.							
MALFORMATIONS.....	19	13	26	21	19	22	15
XI.							
EARLY INFANCY	91	121	120	134	184	154	167
XII.							
OLD AGE	220	273	247	283	275	293	267
XIII.							
AFFECTIONS PRODUCED BY EXTERNAL CAUSES.....	127	157	182	215	185	221	201
XIV.							
ILL-DEFINED DISEASES.....	352	316	449	366	256	103	160
TOTAL NUMBER OF DEATHS	4,472	4,829	5,016	5,074	5,282	5,141	5,389

TABLE X.—*Bertillon*.—Continued.

1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	TOTAL AND PER- CENTAGE FOR 45 YEARS, 1853-1897.	
2,056	2,301	2,268	2,097	2,420	2,153	2,373	2,280	2,166	2,237	2,093	2,035	1,820	2,117	2,578	2,118	72,003	36.16
737	803	827	706	789	763	846	883	924	941	891	935	902	857	928	910	22,509	11.80
336	414	449	474	419	489	510	540	481	538	560	571	554	656	715	720	10,858	5.45
786	833	869	885	991	945	1,120	1,214	1,028	1,068	1,040	929	825	990	1,343	1,058	23,958	12.03
790	804	880	871	1,020	976	1,126	1,156	1,035	1,098	1,191	1,038	1,234	1,243	1,423	1,365	24,487	12.30
210	212	241	250	281	289	303	357	391	434	484	461	542	564	593	591	5,951	2.99
41	54	51	44	45	35	77	57	72	55	54	60	71	55	99	95	1,897	.95
30	38	45	36	48	31	35	25	43	20	38	20	35	12	25	28	1,168	.59
26	23	15	18	25	20	17	14	19	23	22	18	12	18	9	7	652	.33
15	18	20	19	25	28	16	24	23	32	32	30	35	46	47	57	775	.39
194	245	281	250	266	326	282	277	439	417	418	412	283	315	333	333	7,009	3.52
276	278	290	227	198	185	256	183	187	282	293	253	205	228	268	234	9,125	4.58
213	224	216	243	271	273	331	287	288	330	336	315	354	331	429	408	7,673	3.85
139	93	122	139	136	107	104	143	64	60	52	33	33	26	33	42	11,070	5.56
5,849	6,340	6,594	6,259	6,934	6,620	7,996	7,440	7,160	7,535	7,504	7,110	6,905	7,458	8,823	7,966	199,135	100.00

TABLE X.—*Bertillon*.—Continued.

1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.
67 1 9 8 64 46	94 3 5 11 57 45	84 6 12 47 15	128 6 36 91 24	116 1 10 26 31	233 1 22 255 56	152 2 16 28 28	126 2 12 14 12	86 1 2 20 26	106 3 3 19 286 48	157 2 6 20 75 39	130 1 12 26 66 25	190 1 25 63 54 27	172 1 28 63 287 462	121 8 7 45 31	150 8 2 36 50	123 1 4 80 48	123 1 4 62 32	136 1 81 86 54
67 2 7 49 26 1 505 52 1	140 3 12 96 14 11 523 63 3	81 3 6 52 11 14 513 512 3	155 6 9 262 14 28 512 49 3	160 5 9 110 21 16 498 40 3	233 1 22 255 56 547 63 2	152 2 16 28 28 526 56 2	126 2 12 14 12 563 11 2	86 1 2 20 26 517 57 2	106 3 3 19 286 48 555 76 10	157 2 6 20 75 39 577 51 5	130 1 12 26 66 25 535 71 4	190 1 25 63 54 27 600 71 4	172 1 28 63 287 462 584 52 7	121 8 7 45 31 536 51 3	150 8 2 36 50 657 57 5	123 1 4 80 48 600 68 5	123 1 4 62 32 665 55 10	136 1 81 86 54 685 70 6
9 2 11 3 5 1 23 16 8 5 26 11 31	14 5 14 3 1 24 6 8 8 40 36 40	14 3 13 1 512 49 3	13 2 512 49 3	14 5 14 498 40 3	233 1 22 255 56 547 63 2	152 2 16 28 28 526 56 2	126 2 12 14 12 563 11 2	86 1 2 20 26 517 57 2	106 3 3 19 286 48 555 76 10	157 2 6 20 75 39 577 51 5	130 1 12 26 66 25 535 71 4	190 1 25 63 54 27 600 71 4	172 1 28 63 287 462 584 52 7	121 8 7 45 31 536 51 3	150 8 2 36 50 657 57 5	123 1 4 80 48 600 68 5	123 1 4 62 32 665 55 10	136 1 81 86 54 685 70 6
41 51 32 11 70 81	43 57 40 13 4 70 5 48	36 43 36 7 55 6 42	54 62 31 15 71 8 40	49 2 54 42 3 73 6 54	39 5 55 45 20 41 63 7 36	46 1 56 36 13 4 83 3 52	52 4 72 52 14 12 68 8 43	40 3 57 54 13 63 7 38	54 1 69 48 18 5 85 3 48	42 3 64 66 16 10 88 5 55	44 14 77 79 26 13 116 7 51	57 23 58 67 19 26 97 8 78	65 62 67 19 15 98 8 74	23 16 70 86 32 16 100 5 67	28 13 67 99 32 20 80 2 52	76 7 95 70 19 12 89 5 70	78 8 109 72 19 12 83 2 81	78 11 102 86 22 19 112 5 62

TABLE X.—*Bertillon*.—Continued.

1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	TOTAL AND PER- CENTAGE FOR 45 YEARS, 1853-1897.		
121 43	116 85	224 71	135 40	107 42	149 31	133 36	129 10	160 30	125 29	113 42	66 44	76 31	90 30	127 21	103 23	5,485 642	2.75 .32	
18	132	11	29	92	1	1	4	2	9	54	58	33	18	47	15	213	.11	
88	266	207	51	16	33	67	193	123	107	53	29	21	29	34	21	1,208	.61	
49	21	44	77	70	77	25	23	129	45	59	56	96	86	86	17	5,860	2.94	
228	287	191	184	211	102	89	157	133	340	283	231	93	86	112	113	1,742	.88	
7	7	7	4	168	177	336	85	166	115	42	153	75	219	255	146	12	5,702	2.86
17	21	30	26	36	23	33	35	23	19	18	16	14	13	18	8	227	.11	
66	66	77	71	87	59	71	42	41	41	31	45	38	44	86	75	705	.35	
31	32	31	28	22	26	25	31	27	20	27	14	9	21	17	10	3,098	1.56	
10	18	24	8	14	12	13	11	7	4	3	1	1	3	.....	.....	2	.00
1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	987	.50	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	31	.02	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	153	.08	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	.00	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	33	.02	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22	.01	
827	710	800	727	852	740	759	722	705	799	846	777	765	823	850	844	27,567	13.84	
54	54	50	58	72	66	62	53	51	58	73	71	71	84	89	63	2,511	1.26	
19	6	13	11	11	12	26	8	11	13	17	20	30	31	25	43	306	.15	
1	1	1	2	1	3	3	.....	.....	1	.....	3	1	5	6	2	13	.01
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41	29	32	40	36	52	50	72	80	46	37	36	29	42	27	26	1,001	.50	
23	21	12	15	10	18	15	13	12	12	12	20	4	1	2	4	610	.31	
12	13	11	13	15	8	14	16	16	15	12	21	23	17	27	18	349	.18	
1	1	2	1	.....	3	1	1	1	1	1	1	1	1	1	1	20	.01
1	1	3	7	3	5	5	5	9	6	7	4	10	11	4	1	55	.03	
48	45	58	60	49	50	47	68	63	59	78	100	93	121	109	1	1,127	.57	
5	8	12	17	14	13	14	16	23	29	27	25	19	41	27	36	223	.11	
23	21	25	26	30	28	26	45	42	49	47	60	72	42	52	59	759	.38	
14	21	21	19	14	18	29	27	27	41	47	38	32	47	41	43	573	.29	
5	5	1	4	5	2	1	5	14	11	15	10	13	14	21	18	84	.04	
69	58	73	56	50	61	59	39	40	32	25	36	39	45	30	37	2,266	1.13	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	33	28	39	32	45	37	26	16	20	20	16	15	24	20	9	352	.18	
35	2	2	4	6	3	3	4	11	21	8	3	2	9	14	9	563	.28	
24	22	13	32	27	26	37	40	38	40	41	48	39	40	50	81	644	.32	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	.00	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	16	13	21	19	20	16	23	20	29	21	24	18	23	37	22	400	.20	
156	174	178	261	271	254	263	221	87	11	8	4	8	20	.....	.....	4,117	2.07
12	16	16	37	25	29	36	47	39	24	34	39	45	34	62	40	978	.49	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	4	.00	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	5	14	10	51	62	37	17	5	2	.....	.....	.....	.....	.....	3	1,915	.96
98	107	119	99	121	116	130	120	140	145	165	166	187	155	191	192	1,705	.86	
10	24	22	9	17	16	18	40	13	11	22	19	67	42	34	27	533	.27	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	.03	
230	206	211	210	242	219	238	276	289	417	404	435	402	445	473	415	6,017	3.02	
107	122	156	113	99	116	124	131	156	13	15	14	14	12	31	102	3,120	1.57	
49	64	43	22	30	21	27	39	49	72	53	103	82	66	54	33	1,148	.57	
14	17	16	19	23	27	25	12	19	20	21	17	14	25	23	24	557	.28	
121	159	154	136	156	137	162	151	147	120	102	65	49	35	43	41	4,381	2.20	
8	7	9	7	4	3	6	8	6	12	4	2	.....	2	.....	.....	231	.12
2	1	2	1	.....	1	.....	4	1	1	.....	1	1	1	2	.....	23	.01
92	91	81	80	46	45	79	88	89	120	106	87	84	71	1	13	2,850	1.43	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	.00	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	24	.01	

TABLE X.—*Bertillon*.—Continued.

Bertillon Numbers.	CAUSES OF DEATH.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
III.								
DISEASES OF THE CIRCULATORY APPARATUS.								
77	Pericarditis.....		2	1	1	2		1
78	Endocarditis, Acute.....							
79	Organic Diseases of the Heart.....	28	38	61	41	63	66	61
80	Angina Pectoris.....			2		2		1
81	Affections of the Arteries (Atheroma, Aneurism, etc.).....	1		1	1		1	1
82	Embolus and Thrombosis.....							
83	Affections of the Veins (Varices, Hemorrhoids, Phlebitis).....							
84	Affections of the Lymphatic System (Lymphangitis, etc.).....							
85	Hemorrhages.....			1	1	4	5	1
IV.								
DISEASES OF THE RESPIRATORY SYSTEM.								
88	Affections of the Larynx.....	29	44	49	67	72	74	62
89	Affections of the Thyroid Body.....							
90	Bronchitis.....	2	3	4	5	7	13	9
91	Bronchitis, Chronic.....							
93	Pneumonia.....	48	54	79	120	141	166	125
94	Pleurisy.....	7	10	12	13	10	12	18
95	Pulmonary Congestion and Apoplexy.....							
96	Gangrene of Lung.....							
97	Asthma.....	1	2	2	3	2	2	2
98	Pulmonary Emphysema.....							
99	Other Diseases of the Respiratory Apparatus.....	7	3	5	5	2		3
V.								
DISEASES OF THE DIGESTIVE APPARATUS.								
100	Affections of the Mouth and its Adnexa.....	1	4	5	1	3	9	3
101	Affections of the Pharynx.....							
102	Affections of the Oesophagus.....							
103	Ulcer of the Stomach.....							
104	Other Affections of the Stomach (Cancer excepted).....	5	8	7	19	16	9	12
105	Diarrhœa and Enteritis (under two years).....	39	68	91	77	70	93	61
105a	Diarrhœa and Enteritis, Chronic.....							
106	Diarrhœa and Enteritis (two years and over).....	16	35	64	47	65	65	70
107	Parasites, Intestinal.....		1	1		1	1	2
108	Hernias and Intestinal Obstructions.....	1	2	2			5	2
109	Other Affections of the Intestines.....	4	4	4		4	4	5
109a	Diseases of the Anus and Fecal Fistulas.....						1	
110	Icterus Gravis.....							
112	Cirrhosis of the Liver.....							
113	Biliary Calculi.....							
114	Other Affections of the Liver.....	7	8	8	7	21	35	29
115	Affections of the Spleen.....		2					
116	Peritonitis, Simple (Puerperal excepted).....	4	2	13	17	5	10	13
117	Other Affections of the Digestive Apparatus (Cancer and Tubercle excepted).....							
118	Appendicitis and Abscess of the Iliac Fossa.....	2	3	10	10	9	6	6
VI.								
DISEASES OF THE GENITO-URINARY APPARATUS AND ITS ADNEXA.								
119	Nephritis, Acute.....							
120	Bright's Disease.....	1						3
121	Other Diseases of the Kidneys and their Adnexa.....	1	1	7	5	15	8	12
122	Calculi of the Urinary Tract.....		1				2	1
123	Diseases of the Bladder.....	3	1	3	2	3	2	4
124	Diseases of the Urethra, Urinary Abscess, etc.....							
125	Diseases of the Prostate.....		1			5	2	
126	Non-Veneral Diseases of the Male Genital Organs.....							
129	Tumor, Uterine, Non-Cancerous.....							
130	Other Diseases of the Uterus.....	5	4	1	2	2	3	
131	Cysts and other Tumors of the Ovary.....			2	3		4	
132	Other Diseases of the Female Genital Organs.....							

TABLE X.—*Bertillon*.—Continued.

Bertillon Numbers.	CAUSES OF DEATH.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
III.								
DISEASES OF THE CIRCULATORY APPARATUS.								
77	Pericarditis.....					17		10
78	Endocarditis, Acute.....							
79	Organic Diseases of the Heart.....	202	231	264	245	308	290	339
80	Angina Pectoris.....							
81	Affections of the Arteries (Atheroma, Aneurism, etc.).....	1	2	2	2	8	3	5
82	Embolus and Thrombosis.....	3	4	5	5			
83	Affections of the Veins (Varices, Hemorrhoids, Phlebitis).....	2						
84	Affections of the Lymphatic System (Lymphangitis, etc.).....							
85	Hemorrhages.....	1	6	3	4	3	1	3
IV.								
DISEASES OF THE RESPIRATORY SYSTEM.								
88	Affections of the Larynx.....	98	74	107	84	76	91	103
89	Affections of the Thyroid Body.....							
90	Bronchitis.....	67	94	86	101	29	81	113
91	Bronchitis, Chronic.....							
93	Pneumonia.....	311	364	327	344	400	363	465
94	Pleurisy.....	13	17	9	8	13	5	7
95	Pulmonary Congestion and Apoplexy.....							
96	Gangrene of Lung.....							
97	Asthma.....	13	11	16	9	13	10	21
98	Pulmonary Emphysema.....							
99	Other Diseases of the Respiratory Apparatus.....	12	14	20	12	34	10	
V.								
DISEASES OF THE DIGESTIVE APPARATUS.								
100	Affections of the Mouth and its Adnexa.....	1		1	2	2	2	
101	Affections of the Pharynx.....		1	2			1	1
102	Affections of the Oesophagus.....							
103	Ulcer of the Stomach.....							
104	Other Affections of the Stomach (Cancer excepted).....	30	28	39	44	51	43	51
105	Diarrhœa and Enteritis (under two years).....	175	255	254	354	267	367	308
105a	Diarrhœa and Enteritis, Chronic.....							
106	Diarrhœa and Enteritis (two years and over).....	73	95	107	146	155	149	115
107	Parasites, Intestinal.....	1		1				
108	Hernias and Intestinal Obstructions.....	14	8	15	16	10	16	14
109	Other Affections of the Intestines.....	2	9	6	6	21	7	10
109a	Diseases of the Anus and Fecal Fistulas.....							
110	Icterus Gravis.....							
112	Cirrhosis of the Liver.....					15		5
113	Biliary Calculi.....			1	4	1		1
114	Other Affections of the Liver.....	52	58	45	62	35	55	56
115	Affections of the Spleen.....						2	
116	Peritonitis, Simple (Puerperal excepted).....	24	24	27	30	40	40	35
117	Other Affections of the Digestive Apparatus (Cancer and Tubercle excepted).....							
118	Appendicitis and Abscess of the Iliac Fossa.....	9	9	10	8	11	8	17
VI.								
DISEASES OF THE GENITO-URINARY APPARATUS AND ITS ADNEXA.								
119	Nephritis, Acute.....							
120	Bright's Disease.....	61	56	54	44	93	90	143
121	Other Diseases of the Kidneys and their Adnexa.....	20	35	25	44	38	39	25
122	Calculi of the Urinary Tract.....	1		1		1		1
123	Diseases of the Bladder.....	12	9	11	14	19	17	20
124	Diseases of the Urethra, Urinary Abscess, etc.....			2			3	1
125	Diseases of the Prostate.....	4	4	1	3	7	4	4
126	Non-Venereal Diseases of the Male Genital Organs.....							
129	Tumor, Uterine, Non-Cancerous.....							4
130	Other Diseases of the Uterus.....		7	3	6	20	2	2
131	Cysts and other Tumors of the Ovary.....					6	12	8
132	Other Diseases of the Female Genital Organs.....							

TABLE X.—*Bertillon*.—Continued.

1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	TOTAL AND PER- CENTAGE FOR 45 YEARS, 1853-1907.	
21	29	23	29	27	33	19	8	10	8	12	13	8	14	8	17	272	.14
297	358	400	413	362	429	468	485	411	449	458	466	479	512	512	531	184	.09
9	11	9	11	8	7	16	12	15	24	19	29	24	28	23	30	181	.09
2	5	6	7	8	5	3	4	4	7	6	4	2	5	13	10	120	.06
3	5	4	5	7	9	2	12	7	2	....	9	1	20	26	13	84	.04
1	3	....	2	1	2	1	4	....	2	....	2	....	2	3	3	3	.02
3	3	7	7	6	4	1	5	5	3	4	1	3	3	11	7	123	.06
99	121	96	86	88	70	101	57	44	39	41	32	12	23	31	37	3,310	1.66
143	153	201	214	234	213	257	263	201	239	237	181	195	194	248	161	3,720	1.87
31	23	27	46	41	34	51	52	53	35	39	45	41	47	47	71	651	.33
481	488	508	483	569	568	655	776	665	685	669	635	542	686	966	742	14,652	7.36
12	15	18	23	18	26	34	22	24	38	32	18	19	14	21	24	704	.35
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....
13	20	14	13	21	24	11	13	18	22	18	15	11	20	20	12	423	.21
2	....	4	3	2	4	1	4	3	2	3	2	1	1	7	4	31	.02
5	13	11	17	18	6	10	27	20	8	1	1	4	5	2	3	467	.23
2	1	....	2	....	2	....	....	1	....	....	....	....	....	2	4	129	.07
1	8	4	5	9	5	5	6	2	....	....	....	....	....	4	2	65	.03
....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....
59	68	61	75	73	57	67	64	62	85	67	81	93	79	59	79	1,568	.79
421	369	507	470	613	572	655	650	614	597	659	539	579	606	773	633	12,879	6.47
135	164	131	124	127	136	182	148	147	158	123	114	119	140	104	121	4,488	2.25
....	....	1	....	1	....	....	1	....	....	....	....	....	....	....	....	43	.02
16	13	14	12	18	22	24	26	19	26	15	22	36	24	50	66	433	.22
11	12	10	8	15	15	20	74	46	41	85	76	87	32	5	7	642	.32
1	1	1	1	1	....	....	1	1	2	....	2	1	1	2	1	12	.01
....	....	....	....	....	....	....	....	....	....	....	....	....	....	9	6	....	....
16	17	19	27	28	31	28	40	34	38	45	42	41	46	45	60	385	.19
....	2	2	2	4	2	3	4	2	4	2	5	10	4	3	4	41	.02
55	67	47	52	48	48	58	52	57	43	65	16	50	46	45	34	1,865	.94
1	1	1	....	....	....	....	....	1	3	1	....	1	1	....	1	24	.01
59	66	60	63	63	68	62	74	31	23	23	12	11	19	23	20	1,170	.59
....	....	....	....	....	....	1	....	1	54	77	104	161	217	238	261	237	.12
13	15	22	30	20	18	21	16	17	24	29	25	45	28	34	42	506	.25
....
....
140	130	192	176	213	220	230	258	266	314	369	379	457	463	590	446	3,826	1.92
24	39	21	34	17	18	41	44	47	34	27	8	12	14	9	9	963	.48
....	1	1	5	2	2	....	4	5	6	3	4	2	7	4	3	91	.06
25	20	11	23	39	14	22	27	31	21	22	23	22	34	16	24	498	.25
1	1	2	1	....	3	....	1	....	1	....	2	1	2	3	1	18	.01
8	7	4	1	2	8	5	3	10	15	10	7	12	13	10	22	146	.07
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	3	.00
3	8	2	2	2	1	1	5	7	10	22	11	17	12	18	14	78	.04
1	1	3	4	2	6	7	6	11	14	15	19	7	11	10	....	187	.09
8	5	5	4	4	8	6	9	14	17	16	8	12	8	5	12	141	.07
....	....	....	....	....	....	....	....	....	....	....	....	....	....	11	10	....	....

TABLE X.—*Bertillon*.—Continued.

Bertillon Numbers.	CAUSES OF DEATH.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
VII.								
THE PUERPERAL STATE.								
134	Accidents of Pregnancy.....	.....	.....	.....	.....	.....	.....	.....
136	Other Accidents of Labor.....	.....	.....	.....	.....	.....	.....	.....
137	Septicæmia, Puerperal.....	7	2	6	10	8	7	11
138	Albuminuria and Puerperal Eclampsia.....	.....	.....	.....	.....	.....	.....	.....
139	Phlegmasia Alba Dolens, Puerperal.....	.....	.....	.....	.....	.....	.....	.....
140	Other Puerperal Accidents—Sudden Death.....	5	7	9	14	13	24	14
VIII.								
DISEASES OF THE SKIN AND CELLULAR TISSUE.								
142	Gangrene.....	5	2	3	4	8	8	3
143	Furuncle (Carbuncle).....	.....	.....	.....	1	.....	1	1
144	Phlegmon: Warm Abscess.....	2	.....	7	4	3	2	1
145d	Other Diseases of the Skin and its Adnexa.....	.....	3	2	3	6	1	1
IX.								
DISEASES OF THE ORGANS OF LOCOMOTION.								
146	Affections of the Bones (non-Tuberculous).....	.....	.....	.....	.....	.....	.....	.....
147	Arthritis, and Other Affections of the Joints.....	3	1	2	7	6	6	9
X.								
MALFORMATIONS.								
150	Malformations, Congenital (still-births excepted).....	3	7	11	5	12	14	14
XI.								
EARLY INFANCY.								
151	Congenital Icterus, Debility, and Sclerema.....	2	13	34	17	17	33	25
152	Other Diseases of Early Infancy.....	8	21	29	16	35	29	31
153	Lack of Care.....	.....	.....	.....	.....	.....	.....	.....
XII.								
OLD AGE.								
154	Senile Debility.....	58	67	84	76	119	114	117
XIII.								
AFFECTIONS PRODUCED BY EXTERNAL CAUSES.								
155	Suicide by Poison.....	.....	.....	.....	.....	1	2	2
156	Suicide by Asphyxia.....	.....	.....	1	.....	.....	.....	.....
157	Suicide by Hanging or Strangulation.....	.....	.....	1	3	3	6	3
158	Suicide by Submersion.....	.....	.....	.....	.....	.....	3	1
159	Suicide by Firearms.....	.....	.....	.....	.....	.....	.....	1
160	Suicide by Cutting Instruments.....	.....	.....	.....	.....	.....	.....	.....
161	Suicide by Jumping from High Places.....	.....	.....	.....	.....	.....	.....	.....
163	Other Suicides.....	3	3	6	1	4	2	2
164	Fractures.....	1	1	.....	4	.....	.....	.....
166	Other Accidental Traumatisms.....	31	23	19	16	40	38	37
167	Burns and Scalds.....	9	9	14	12	7	6	13
169	Insolation.....	.....	.....	.....	.....	.....	.....	.....
170	Freezing.....	.....	.....	.....	.....	.....	.....	.....
171	Electrical Disturbances.....	.....	.....	.....	.....	.....	.....	.....
172	Accidental Submersion.....	13	15	18	13	20	24	24
174	Absorption of Deleterious Gases (Suicide excepted).....	2	2	.....	7	3	.....	1
175	Other Acute Poisonings.....	1	3	6	4	3	5	4
176	Other External Violence (Homicide).....	3	.....	9	1	1	1	1
XIV.								
ILL-DEFINED DISEASES.								
177	Dropsy.....	45	34	32	50	48	44	41
179	Unspecified or ill-defined Causes of Death.....	115	151	188	306	288	310	263

TABLE X.—*Bertillon*.—Continued.

1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...
9	7	4	14	14	13	7	8	12	10	16	18	0	17	16	18	18	17	17
...	...	...	...	...	...	2	7	4	4	6	7	4	5	13	13	6	5	11
13	19	23	21	23	18	22	19	16	23	22	27	32	24	28	22	24	24	15
...
10	11	7	8	6	12	6	7	6	4	7	10	12	12	5	12	11	8	10
...	1	...	...	...	1	2	...	1	2	1	2	...	1	...	1	1	3	...
7	11	4	7	9	7	8	15	10	4	9	11	10	10	18	9	18	7	13
4	6	5	2	3	1	5	7	4	4	2	5	2	7	6	7	5	5	7
...
5	15	8	9	7	5	5	6	12	11	15	5	11	18	15	16	27	15	10
...
15	13	11	13	8	10	12	17	16	15	14	15	17	15	17	15	11	26	32
...
42	45	35	47	46	62	54	60	47	34	57	53	100	169	154	135	75	67	72
31	40	41	34	28	31	23	30	23	24	34	20	31	50	42	20	22	27	16
...
116	132	143	161	193	152	178	188	206	217	204	232	233	254	223	216	241	213	222
...
1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	4	8	13	6	12	11	15	18	15	27	19	18	8	18	26	18	22	21
...
55	31	50	74	66	52	69	61	56	62	63	66	84	86	55	79	69	76	74
24	21	14	10	12	16	18	16	16	15	12	12	12	14	23	17	12	18	11
...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...
...
32	29	29	21	26	20	27	28	20	24	30	24	29	36	39	35	37	30	44
1	3	3	1	1	1	...	...	...	...	...	...	...	4	6	5	0	5	...
7	9	2	1	3	2	6	2	...	4	2	4	1	5	5	6	4	8	6
4	3	1	5	2	...	1	5	...	2	5	...	2	3	4	3	4	3	3
...
56	48	46	52	45	61	49	49	49	53	61	56	55	60	39	56	66	63	38
225	220	209	237	213	247	204	225	236	351	196	292	463	287	209	263	245	248	259

TABLE X.—*Bertillon*.—Continued.

Bertillon Numbers.	CAUSES OF DEATH.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
VII.								
THE PUERPERAL STATE.								
134	Accidents of Pregnancy							2
136	Other Accidents of Labor	9	15	22	28	16	12	19
137	Septicæmia, Puerperal	8	3	6	3	1	8	7
138	Albuminuria and Puerperal Eclampsia	1						
139	Phlegmasia Alba Dolens, Puerperal	27	33	32	19	43	31	19
140	Other Puerperal Accidents—Sudden Death							
VIII.								
DISEASES OF THE SKIN AND CELLULAR TISSUE.								
142	Gangrene	14	11	14	6	10	15	19
143	Furuncle (Carbuncle)	1		2	1	3	4	1
144	Phlegmon: Warm Abscess	14	5	17	14	18	18	21
145	Other Diseases of the Skin and its Adnexa	3	2	6	3	1	9	2
IX.								
DISEASES OF THE ORGANS OF LOCOMOTION.								
146	Affections of the Bones (non-Tuberculous)							
147	Arthritis, and other Affections of the Joints	20	15	11	25	26	32	34
X.								
MALFORMATIONS.								
150	Malformations, Congenital (still-births excepted)	19	13	26	21	19	22	15
XI.								
EARLY INFANCY.								
151	Congenital Icterus, Debility and Sclerema	69	93	92	101	137	128	132
152	Other Diseases of Early Infancy	22	28	28	33	47	26	35
153	Lack of Care							
XII.								
OLD AGE.								
154	Senile Debility	220	273	247	283	275	293	267
XIII.								
AFFECTIONS PRODUCED BY EXTERNAL CAUSES.								
155	Suicide by Poison							
156	Suicide by Asphyxia							
157	Suicide by Hanging or Strangulation							
158	Suicide by Submersion							
159	Suicide by Firearms							
160	Suicide by Cutting Instruments							
161	Suicide by Jumping from High Places							
163	Other Suicides	13	10	23	31	25	22	20
164	Fractures							
166	Other Accidental Traumatisms	73	87	82	107	94	118	98
167	Burns and Scalds	13	21	16	17	18	20	19
169	Insolation							
170	Freezing							
171	Electrical Disturbances							
172	Accidental Submersion	22	33	29	40	27	41	42
174	Absorption of Deleterious Gases (Suicide excepted)			19	8	12	11	10
175	Other Acute Poisonings	5	5	9	6	6	7	9
176	Other External Violence (Homicide)	1	1	4	6	3	2	3
XIV.								
ILL-DEFINED DISEASES.								
177	Dropsy	50	37	47	50	48	42	44
179	Unspecified or Ill-defined Causes of Death	302	279	402	316	208	61	116

TABLE X.—*Bertillon*.—Concluded.

1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	TOTAL AND PER- CENTAGE FOR 45 YEARS, 1853-1897.	
2	2	2	1	....	2	6	4	8	7	13	12	13	7	21	8	61	.03
....	....	....	....	3	1	4	....	6	5	5	3	8	6	2	22	27	.01
10	25	18	17	19	12	30	21	32	24	16	19	34	26	49	42	659	.33
6	7	6	6	4	5	8	4	13	12	13	20	14	13	23	21	247	.12
....	....	....	1	....	....	....	1	....	....	....	....	....	....	1	....	5	.00
23	20	25	19	19	15	29	27	13	7	7	6	2	3	3	2	915	.46
6	15	19	26	24	16	21	17	13	....	....	3	....	....	16	14	446	.22
2	3	....	....	2	2	4	3	3	3	2	1	2	1	4	2	56	.03
13	15	19	17	13	6	5	....	1	7	21	13	29	6	5	7	436	.22
9	5	7	3	9	7	5	5	26	10	12	3	4	5	....	5	230	.12
....	....	....	....	....	....	....	....	....	....	....	....	....	....	7	6	....	....
26	23	15	18	25	20	17	14	19	23	22	18	12	18	2	1	652	.33
15	18	20	19	25	28	16	24	23	32	32	30	35	46	47	57	775	.39
157	211	230	195	225	251	245	224	373	344	390	372	257	294	316	315	5,464	2.74
37	34	51	55	41	75	37	53	66	73	28	40	26	21	16	18	1,545	.78
....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....
276	278	290	227	198	185	256	183	187	282	293	253	205	228	268	231	9,125	4.58
....	....	3	2	4	9	3	5	8	6	6	9	14	5	13	11	63	.03
....	....	....	2	1	2	2	1	6	2	10	4	4	6	1	5	31	.02
....	....	7	8	1	5	1	4	15	3	8	6	9	10	13	13	78	.04
....	....	....	3	3	5	2	2	8	5	....	6	6	9	9	7	42	.02
....	....	....	4	....	13	2	4	3	11	12	11	8	7	10	15	64	.03
....	....	2	....	2	3	1	4	....	4	2	4	2	6	8	4	23	.01
....	....	2	....	....	....	....	....	....	....	....	1	1	1	1	....	3	.00
17	16	7	5	8	3	8	1	5	....	....	....	....	....	....	....	519	.26
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6	.00
97	122	95	126	129	124	187	160	118	163	141	146	156	158	185	163	3,699	1.86
23	17	27	20	20	18	21	26	28	28	25	41	21	28	33	36	781	.39
....	6	1	....	6	5	17	....	8	4	47	1	23	2	13	37	100	.05
....	1	1	2	1	....	....	2	1	2	2	3	4	3	....	14	15	.01
....	....	....	2	1	1	....	1	....	2	6	1	2	2	2	....	14	.01
58	39	46	52	71	52	48	47	52	61	39	40	60	45	64	57	1,521	.76
10	14	8	9	12	17	26	14	21	22	24	22	19	31	53	33	313	.16
6	7	12	5	10	15	9	13	6	11	12	8	10	6	14	6	264	.13
2	2	5	3	2	1	4	3	9	6	2	12	13	15	10	7	137	.07
49	39	48	51	48	38	42	44	7	....	....	....	....	....	....	....	1,980	1.00
90	54	74	88	88	69	62	99	57	60	52	33	33	26	33	42	9,090	4.56

TABLE XI.—OCCUPATIONS AND AGES OF DECEDENTS.

Showing the Number and Occupation of Decedents for the year 1901, and for a period of Forty-nine Years and Seven Months, 1852 to 1901, inclusive.

[AGES UNDER TWENTY EXCLUDED.]

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS, June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
I.						
TILLERS OF THE SOIL.						
Farmers.....	169	10,415	61.63	7,358	493,630	67.09
Florists.....	1	71	71.00	66	3,654	55.36
Gardeners.....	29	1,833	63.21	367	21,843	59.52
Total.....	199	12,319	61.90	7,791	519,127	66.63
II.						
PROFESSIONAL AND PERSONAL.						
Acrobats.....				1	24	24.00
Actors.....	1	22	22.00	16	544	34.00
Aeronauts.....				1	23	23.00
Architects.....	2	111	55.50	19	1,066	56.10
Artists.....	3	199	66.33	44	2,328	52.91
Assayers and Analytical Chemists.....				8	506	63.25
Athletes.....				1	25	25.00
Authors.....	1	75	75.00	9	626	69.56
Ball-players.....				2	65	32.50
Chiroprpodists.....				1	58	58.00
Civil Engineers.....				54	2,673	49.50
Clergymen.....	8	491	61.38	288	18,429	63.99
Couriers.....				2	113	56.50
Dancing-masters.....				3	173	57.67
Dentists.....	6	303	51.00	56	2,967	52.98
Designers.....	1	85	85.00	25	1,305	52.20

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Draughtsmen	1	46	46.00	16	551	34.44
Electricians	10	312	31.20	28	1,001	35.75
Inspectors	4	154	38.50	24	1,205	50.21
Inventors				16	1,054	65.87
Journalists (Editors and Reporters)	3	98	32.67	55	2,566	46.65
Judges and Justices				18	1,156	64.22
Lawyers	9	585	65.00	209	12,024	57.53
Lecturers				2	108	54.00
Musicians	1	22	22.00	86	4,057	47.17
Nurses	1	28	28.00	19	1,022	53.79
Photographers and Lithographers	2	65	32.50	32	1,493	46.65
Physicians	13	752	57.85	361	21,497	59.55
Professors and Teachers ..	5	319	63.80	156	7,879	50.50
Public Officers	6	400	66.67	101	6,036	59.76
Sculptors				1	41	41.00
Sheriffs and Policemen ..	11	546	49.64	152	8,258	54.33
Students	2	51	25.50	90	2,059	22.88
Submarine Divers				1	73	73.00
Telegraph and Telephone Operators	3	82	27.33	27	813	30.11
Treasurers	5	303	60.60	12	641	53.42
Trustees	1	56	56.00	1	56	56.00
Veterinary Surgeons				9	470	52.22
Weighers and Gaugers ..				9	576	64.00
Total	99	5,105	51.57	1,955	105,561	54.00

III.

OPTIONAL ACTIVITY.

Agents and Canvassers ...	8	490	61.25	241	12,538	52.02
Insurance	8	414	51.75	36	1,949	54.14
Real Estate	3	193	64.33	23	1,473	64.04
Auctioneers				6	274	45.67
Bankers and Brokers ..	10	591	59.10	177	10,615	59.97
Bank Officers	2	124	62.00	71	4,565	64.30
Bartenders	2	80	40.00	56	2,012	35.93

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS, June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Booksellers.....				3	213	71.00
Bottlers.....	1	46	46.00	10	360	36.00
Butchers and Marketmen.	10	605	60.50	331	17,144	51.79
Carriage Dealers.....				2	113	56.50
Coal and Wood.....				16	965	51.52
Dry Goods.....				4	207	51.75
Fish and Oyster.....	3	165	55.00	31	1,852	59.74
Furniture.....	3	199	66.33	7	442	63.14
Grain.....				5	299	59.80
Hardware.....				8	499	62.37
Ice.....	2	117	58.50	7	368	52.57
Junk.....	4	253	63.25	19	1,079	56.79
Leather.....				2	81	40.50
Liquor.....	8	400	50.00	139	6,485	46.65
Lumber.....				18	1,004	55.55
News.....	2	111	55.50	8	422	52.75
Provision.....	1	60	60.00	23	1,305	56.74
Shoe.....				14	757	54.07
Soap.....				1	65	65.00
Wool Waste.....				1	56	56.00
Clothiers.....	1	50	50.00	17	959	56.41
Collectors.....	4	218	54.50	8	380	47.50
Commercial Travelers....	7	396	56.56	34	1,559	45.85
Contractors and Builders.	6	360	60.00	138	8,273	59.95
Druggists and Apothecaries.....	11	483	43.91	133	9,239	69.46
Fruiterers.....	1	57	57.00	9	433	48.11
Grocers.....	26	1,539	59.19	507	27,586	54.41
Hotel and Innkeepers.....	2	105	52.50	185	10,213	55.21
Saloon and Restaurant..	7	282	40.29	214	9,827	45.92
Stable.....	4	242	60.50	81	4,433	54.73
Store.....	11	626	56.91	69	3,695	53.55
Mail Carriers.....				12	530	44.17
Manufacturers.....	15	934	62.27	703	42,948	61.09
Merchants.....	35	1,126	32.17	1,439	83,239	57.85
Opticians.....				6	338	56.33
Organ and Piano Tuners..				6	402	67.00
Policy Brokers.....				1	24	24.00
Pork and Meat Cutters and Packers.....	4	194	48.50	25	1,132	45.28
Promoters.....				1	25	25.00

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS, June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Railroad Officials.....	2	86	43.00	8	465	58.13
Ship Chandlers.....				5	318	63.60
Tobacconists.....	2	103	51.50	17	977	57.47
Traders.....				283	14,259	50.39
Undertakers.....	1	48	48.00	58	3,317	57.02
Total.....	206	10,697	51.93	5,218	291,713	55.91
IV.						
OUTDOOR.— <i>Local.</i>						
Boat-builders.....				32	1,999	62.47
Brick-makers.....				8	352	44.00
Brick and Stone-layers.....				14	663	47.36
Calkers.....				15	1,033	68.87
Carpenters and Joiners...	90	5,378	59.75	2,421	136,265	56.28
Masons.....	26	1,539	59.19	1,001	56,199	56.14
Millwrights.....	3	254	84.67	40	2,718	67.95
Pavers.....				3	129	43.00
Riggers.....	1	25	25.00	25	1,343	53.72
Roofers.....				8	415	55.33
Ship Carpenters.....	1	72	72.00	86	5,940	69.07
Slaters.....				9	398	44.22
Stone-cutters and Marble-workers.....	14	849	60.64	326	16,106	49.40
Superintendents of Highways.....				1	79	79.00
Tanners and Curriers.....	1	63	63.00	62	3,959	63.85
Wheelwrights.....	3	157	52.33	120	7,218	60.15
Total.....	139	8,337	59.98	4,171	234,816	56.30
V.						
INDOOR.— <i>Active.</i>						
Axe and Scythe-grinders..				4	222	55.50
Bakers.....	14	786	56.14	190	12,165	64.03

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Basket-makers.				7	404	57.71
Belt.				13	760	58.46
Bobbin.	2	126	63.00	6	329	54.83
Boiler.	5	280	56.00	88	3,748	42.59
Bolt.	2	117	58.50	3	158	52.67
Broom and Brush.				16	813	50.81
Button.				1	37	37.00
Cabinet.	5	342	68.40	149	8,761	58.79
Card.				4	201	50.25
Carriage, and Trimmers.	1	73	73.00	79	4,405	55.76
Chair.				1	70	70.00
Comb.				5	187	37.40
Mattress.				1	38	38.00
Pattern.	4	276	69.00	89	5,291	59.44
Pianoforte.				3	157	52.33
Picker.				5	303	60.06
Plane.				1	79	79.00
Pump and Block.				14	788	55.71
Reed.				6	352	58.67
Sash and Blind.				10	502	50.20
Scythe.				1	83	83.00
Spindle.				5	297	59.40
Stopper.				1	22	22.00
Stove and Mounters.				5	245	49.00
Tool.	5	258	51.60	45	2,376	52.80
Trunk.				3	89	29.67
Umbrella.				2	103	51.50
Wringer.	3	80	26.67	4	112	28.00
Beamers.				2	59	29.50
Bell-hangers.				2	47	23.50
Blacksmiths and Farriers.	33	2,024	61.33	790	43,218	54.71
Bleachers and Fullers.	4	156	39.00	76	3,796	49.94
Bonnet-dressers.				2	73	36.50
Brewers.	1	61	61.00	24	1,175	48.96
Britannia-workers.				1	65	65.00
Calico-printers.				59	3,243	54.96
Car-builders.				1	57	57.00
Stair.				4	219	54.75
Carders.	1	55	55.00	16	861	46.62
Card-grinders.				3	138	46.00
Carvers.				3	147	49.00

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Confectioners	3	136	45.33	52	2,424	46.62
Cooks and Caterers	6	355	59.17	140	6,831	48.79
Coopers	1	86	86.00	134	8,856	66.09
Coppersmiths				16	969	60.56
Cutters				8	394	49.25
Nail				12	490	40.83
Decorators				14	526	37.57
Distillers				1	77	77.00
Dyers	5	272	54.40	159	8,117	51.05
Founders, Brass and Iron	2	78	39.00	22	1,079	49.05
Foundrymen	1	64	64.00	24	1,273	53.04
Gasfitters				65	2,830	43.54
Gilders				12	535	44.58
Gun and Locksmiths	2	68	34.00	28	1,525	54.46
Hatters	1	73	73.00	27	1,473	54.56
Heaters				6	240	40.00
Iron Rollers and Workers	2	97	48.50	21	1,006	47.90
Japanners				1	47	47.00
Lathers	1	54	54.00	8	350	43.75
Loom-fixers	3	165	55.00	7	309	44.14
Machinists	69	3,243	47.00	1,865	91,245	48.92
Mechanics	9	485	53.89	517	27,374	52.95
Melters				12	667	55.58
Miners				18	1,018	56.55
Moulders	20	974	48.70	388	21,101	54.36
Painters and Glaziers	61	3,335	54.67	1,103	54,159	49.10
Paperhangers				25	1,314	52.56
Plasterers and Stucco-workers	4	175	43.75	63	3,031	48.11
Platers				4	251	62.75
Electro				6	389	64.83
Gold				4	163	40.75
Plumbers	2	79	39.50	125	4,890	39.12
Pressmen				6	261	43.50
Refiners				5	189	37.80
Gold	1	26	26.00	4	179	44.75
Oil				1	76	76.00
Sugar	1	79	79.00	8	390	48.75
Soap-boilers				5	353	70.60
Steampipers	5	165	33.00	18	686	38.11
Stove Manufacturers				7	416	59.43

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS, June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Superintendents and Overseers	26	1,621	62.35	423	23,720	56.08
Tallow Chandlers.....	.....	.....	.....	4	322	80.50
Tinsmiths.....	12	609	50.75	156	7,549	48.39
Upholsterers.....	3	153	51.00	64	2,673	41.77
Wire-workers.....	1	41	41.00	16	685	42.88
Wood-carvers.....	.....	.....	.....	4	149	37.25
Finishers .....	.....	.....	.....	7	383	54.71
Turners.....	5	268	53.60	60	2,622	43.70
Total	326	17,335	53.17	7,419	381,801	51.46
VI.						
INDOOR.— <i>Activity Restricted.</i>						
Barbers.....	17	634	37.29	298	10,570	35.47
Bookbinders.....	1	26	26.00	28	1,304	46.57
Bookkeepers and Accountants.....	18	1,015	56.39	470	21,447	45.63
Box-makers.....	1	59	59.00	24	1,149	47.88
Chain.....	.....	.....	.....	5	261	52.20
Cigar.....	3	202	67.33	113	5,254	46.49
Clock and Watch.....	.....	.....	.....	44	2,460	55.91
Harness and Saddle	4	229	57.25	142	7,200	50.70
Paper.....	.....	.....	.....	7	389	55.57
Rope.....	.....	.....	.....	25	1,672	66.88
Sail.....	1	83	83.00	39	2,290	58.72
Shoe.....	14	905	64.64	670	38,879	58.03
Chasers.....	2	109	54.50	20	775	38.75
Clerks and Salesmen.....	87	3,260	37.47	1,494	56,488	37.81
Compositors .....	.....	.....	.....	8	382	47.75
Die-cutters and Sinkers.....	.....	.....	.....	24	1,138	47.41
Enamelers	1	51	51.00	9	496	55.11
Engravers	6	317	52.83	154	7,595	49.32
File-cutters and Forgers..	8	351	43.88	106	4,352	41.06
Finishers	1	64	64.00	23	1,149	49.96
Brass.....	.....	.....	.....	7	314	44.86
Folders.....	.....	.....	.....	5	242	48.40

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS, June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Glass-blowers.....	.....	.....	.....	1	57	57.00
Jewelers.....	53	2,385	45.00	1,271	53,765	42.30
Shell.....	.....	.....	.....	3	182	60.67
Knitters.....	.....	.....	.....	3	82	27.33
Lapidaries.....	.....	.....	.....	12	430	35.83
Millers.....	2	137	68.50	53	3,084	58.19
Operatives.....	79	3,209	40.62	2,840	125,335	44.13
Pearl-cutters.....	.....	.....	.....	4	157	39.25
Polishers.....	6	288	48.00	48	2,202	45.88
Marble.....	.....	.....	.....	1	62	62.00
Silver.....	.....	.....	.....	2	59	29.50
Steel.....	.....	.....	.....	1	42	42.00
Printers.....	10	542	54.20	224	12,730	56.83
Proofreaders.....	.....	.....	.....	1	70	70.00
Publishers.....	1	51	51.00	2	105	52.50
Roll-coverers.....	.....	.....	.....	34	1,947	57.26
Rubber-workers.....	11	500	45.45	209	8,830	42.25
Silversmiths.....	14	790	56.43	147	6,719	45.71
Tailors.....	6	409	68.17	471	26,194	55.61
Weavers.....	38	1,856	48.84	38	1,856	48.84
Wool-sorters.....	1	27	27.00	71	3,475	48.94
Total.....	385	17,499	45.45	9,151	413,159	45.15

VII.

OCCUPATIONS AT LARGE.

Army Officers.....	.....	.....	.....	9	530	58.88
Naval.....	.....	.....	.....	20	966	48.30
Bill-posters.....	.....	.....	.....	3	162	54.00
Boatmen.....	2	91	45.50	34	1,888	55.53
Bootblacks.....	1	46	46.00	1	46	46.00
Brakemen.....	3	77	25.67	142	4,261	30.01
Butlers.....	2	64	32.00	7	255	36.43
Coachmen.....	10	482	48.20	219	9,753	44.53
Conductors and Motor-men.....	8	410	51.25	70	2,891	41.30
Drivers.....	4	159	39.75	53	1,975	37.26
Hack and Cab.....	8	349	43.63	64	2,810	43.91

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS, June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Drovers.....				2	83	41.50
Elevator Operators.....				3	127	42.33
Engineers and Firemen...	32	1,632	51.00	531	26,495	49.90
Expressmen.....	4	177	44.25	113	5,745	50.84
Fire Company Members..	2	137	68.50	12	592	49.33
Fishermen and Oyster- men.....	11	500	45.45	283	15,224	53.80
Footmen.....				1	24	24.00
Highway Surveyors ..				1	61	61.00
Hostlers.....	9	307	34.11	171	7,332	42.88
House-movers.....				9	611	67.89
Ice-men.....				6	395	65.83
Janitors.....	12	717	59.75	119	6,449	54.19
Laborers.....	459	21,049	45.86	11,581	570,875	49.29
Lamplighters				21	1,152	54.86
Laundrymen.....	2	108	54.00	25	1,083	43.32
Linemen.....				14	629	44.93
Longshoremen..	4	172	43.00	7	313	44.71
Lumbermen.....	1	44	44.00	5	266	53.20
Mail-carriers.....	2	67	33.50	12	555	46.25
Milkmen.....	3	137	45.67	23	854	37.13
Peddlers.....	11	606	55.09	209	10,518	50.32
Pilots.....				24	1,336	55.67
Porters.....				56	2,611	46.62
Roofers.....				2	126	63.00
Sailors.....	15	813	54.20	333	16,164	48.54
Scissors-grinders.....				1	72	72.00
Sea-captains or Ship-mas- ters.....	7	425	60.71	208	14,835	71.32
Servants.....				30	1,322	44.07
Sextons.....				13	813	62.54
Sinkers of Artesian Wells.				3	163	54.33
Soldiers.....	1	32	32.00	158	4,904	31.04
Stage-drivers				8	398	49.75
Stevedores.....				19	901	47.42
Stewards.....				28	1,328	47.43
Switchmen, Gatemen, etc..	6	365	60.83	30	1,694	56.47
Teamsters.....	37	1,822	49.24	765	35,831	46.84
Theatrical Managers.....				3	137	45.67
Waiters.....	4	147	36.75	137	5,543	40.46
Watchmen.....	9	523	58.11	209	11,994	57.39

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Whitewashers.....				8	452	56.50
Wood-sawyers.....				5	239	47.80
Total.....	669	31,458	47.02	15,810	775,783	49.07
VIII.						
EMPLOYMENTS OF WOMEN.						
Actresses ..				3	112	37.33
Agents				1	59	59.00
Artists.....				6	321	53.50
Basket-makers				2	149	74.50
Box.....				5	150	30.00
Broom and Brush.....				1	34	34.00
Braid.....				1	66	66.00
Cap				1	28	28.00
Chain.....	1	25	25.00	5	177	35.40
Cigar.....				8	243	30.37
Dress, and Seamstresses.	20	970	48.50	415	16,916	40.76
Boarding-house Keepers..	1	51	51.00	27	1,677	62.11
Boatwomen.....				1	60	60.00
Bookkeepers.....	5	171	34.20	23	709	30.83
Charwomen.....				1	60	60.00
Clerks and Saleswomen...	10	346	34.60	56	1,618	28.89
Compositors				1	28	28.00
Cooks	4	220	55.00	63	3,345	53.10
Farming.				2	124	62.00
Hairdressers.....				2	55	27.50
Jewelers.....	3	84	28.00	23	648	28.17
Laboring.....				16	699	43.69
Lace-knitters.....				1	49	49.00
Laundresses	2	105	52.50	53	2,641	49.83
Matrons.....				2	102	51.00
Midwives.....				2	128	64.00
Milliners.....	2	84	42.00	65	2,346	36.09
Modistes.....				1	38	38.00
Musicians.....				4	125	31.00
Nurses.....	11	546	49.63	139	7,991	57.49
Oculists				1	59	59.00

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS, June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Operatives	53	2,052	38.72	1,165	37,357	32.07
Physicians				11	647	58.82
Postmistresses				1	28	28.00
Public Officers				2	110	55.00
Rubber-workers	1	30	30.00	24	698	29.08
Sculptors	1	30	30.00	1	30	30.00
Servants	19	856	45.05	602	28,659	47.61
Sisters of Mercy	1	47	47.00	39	1,578	40.46
Stenographers	1	23	23.00	1	23	23.00
Stewardesses				2	114	57.00
Storekeepers	1	64	64.00	3	163	54.33
Superintendents				2	126	63.00
Tailoresses	2	110	55.00	152	7,120	46.84
Teachers	8	315	39.38	266	13,348	50.18
Music				1	24	24.00
Telegraph and Telephone Operators				10	299	29.90
Typewriters	1	42	42.00	1	42	42.00
Upholsterers				1	34	34.00
Waitresses				12	341	28.42
Total	147	6,171	41.98	3,227	131,498	40.75

TABLE XI.—OCCUPATIONS AND AGES.—(RECAPITULATION.)

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1901.			FORTY-NINE YEARS AND SEVEN MONTHS, June 1, 1852, to December 31, 1901.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
I. TILLERS OF THE SOIL	199	12,319	61.90	7,791	519,127	66.63
II. PROFESSIONAL AND PERSONAL.	99	5,105	51.57	1,955	105,561	54.00
III. OPTIONAL ACTIVITY.	206	10,697	51.93	5,218	291,713	55.91
IV. OUTDOOR.— <i>Local</i>	139	8,337	59.98	4,175	234,816	56.30
V. INDOOR.— <i>Active</i>	326	17,335	53.17	7,419	381,801	51.46
VI. INDOOR.— <i>Activity Restricted</i>	385	17,499	45.45	9,151	413,189	45.15
VII. OCCUPATIONS AT LARGE. . .	669	31,458	47.02	15,810	775,783	49.07
VIII. EMPLOYMENTS OF WOMEN . . .	147	6,171	41.98	3,227	131,498	40.75
ALL CLASSES	2,170	108,921	50.19	54,746	2,853,488	52.12

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1901.—Continued.

OCCUPATIONS.	Whole Number.																										
	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhea and Dysentery.	Enteritis.	Epilepsy.	Erysipelas.	Fever, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
Artists.....	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	..	..	..	..	..	..	..
Authors.....	1	..	1	..	..	..	..	..	1	1	1	1	1	1	..	..	..	2	..	1	1	..	..	1	..	..	..
Clergymen.....	8	1	..	..	..	..	..	..	1	1	1	..	1	..	..	..	..	..	..	1	1	..	..	1	..	..	..
Dentists.....	5	1	1	..	1	..	..	..	1	1	..	..	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..
Designers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Draughtsmen.....	1	..	..	..	1	..	..	..	1	4	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..
Electricians.....	10	2	1	..	..	..	..	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	1	..
Inspectors.....	4	1	1	..	..	..	..	1	..	2	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..
Journalists (Editors and Reporters) ..	3	..	..	1	..	..	..	..	1	1	1	1	1	..	..	..	3	..	..	1	1	1	..	1	..	..	..
Lawyers.....	8	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Musicians.....	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Photographers and Lithographers...	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Physicians.....	12	1	3	..	..	..	..	..	2	2	..	..	..	1	..	1	1	..	..	1	2	..	..	..	1	..	..
Professors and Teachers.....	5	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	1	1	2	..	..	..	..	..
Public Officers.....	6	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Sheriffs and Policemen.....	11	2	..	..	..	..	..	..	1	1	1	1	1	1	..	..	..	..	..	3	..	2	..	2	..	..	..
Students.....	2	..	..	..	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Telegraph and Telephone Operators.	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1901.—Continued.

OCCUPATIONS.	Whole Number.																													
		Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhœa and Dysentery.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.	
Treasurers.....	4	..	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Trustees.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Total.....	93	5	10	..	1	2	1	2	8	19	..	1	2	1	..	..	..	1	14	1	1	8	1	2	..	9	..	2	2	2
III.																														
OPTIONAL ACTIVITY.																														
Agents and Canvassers...	7	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	1	..	..	2	..	..	..	..
Insurance.....	8	..	1	2	..	1	..	..	1	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Real Estate.....	3	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bankers and Brokers...	10	1	..	1	..	..	..	..	..	..	2	..	..	..	..	..	1	1	1	1	1	2	..	1	..	..	..	1	..	..
Bank Officers	2	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	1	..	..	..	1	..	..	..	..	..	..
Bartenders.....	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bottlers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..
Butchers and Marketmen.....	10	1	1	1	..	..	..	..	..	..	2	..	..	..	..	..	..	1	1	1	1	1	1	1	1	1	2	..	..	..

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1901.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhea and Dysentery.	Enteritis.	Epilepsy.	Erysipelas.	Fever, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
Clothiers.....	1	1																				1					1	
Collectors.....	4			1																	1				2			
Commercial Travelers.....	7			1															1	1					1			
Contractors and Builders.....	5			1								1							1		3							
Druggists and Apothecaries.....	10			2				1	1	1	1								2	1	2							
Fish and Oyster Dealers.....	3										1							1										
Fruit.....	1										1																	
Furniture.....	3			1																	1				1			
Ice.....	2																2											
Junk.....	4			1					1		1																1	
Liquor.....	8			1					3		1														2			
News.....	2																					2						
Provision.....	1										1																	
Grocers.....	23	3	1	1		1	1	1			1								3		4		3		4			
Hotel and Innkeepers.....	2										1															1		
Saloon and Restaurant.....	7		1	1							2							1			1		1					
Stable.....	4			3																								
Store.....	11	1		3		1				1	1								3									

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1901.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhea and Dysentery.	Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
Boatmen.....	2	1																	1										
Bootblacks.....	1																					1							
Brakemen.....	3																												
Butlers.....	2	1									1																		
Coachmen.....	9	1							2	2									2			2							
Conductors and Motormen.....	7	1							3	1										1		1							
Drivers.....	3	1							1	1									1										
Hack and Cab.....	8	2								3					1								1	1					
Engineers and Firemen.....	28	1	2	3	1				2	5								1	5	1		1	3			3			1
Expressmen.....	4											1													1			1	
Fire Company Members.....	2	1																		1									
Fishermen.....	11	1		4					2									1				3							
Hostlers.....	9	3								1												1	1			3			

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1901.—Continued.

OCCUPATIONS.		Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhea and Dysentery.	Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
Janitors.....	12	2										1						1		5			1				2			
Laborers.....	448	42	8	24	1	4	4	7	16	12	98	4	2	4	1	1	1	1	9	66	5	2	37	11	13	2	54	1	8	12
Laundrymen.....	2	1										1							1											
Longshoremen.....	4	1																	1	1						1				
Lumbermen.....	1											1																		
Mail-carriers.....	2																1													
Milkmen.....	3										1												1			1				
Peddlers.....	11	1	1	2		1	1	1	1	1	1	1											1			1				1
Sailors.....	15	2				1	1	1	1	1	1	2						1	2	2		3	3	2						1
Sea-captains or Ship-masters.....	6	2									1											1								
Soldiers.....	1	1																												
Switchmen and Gatemen.....	6	1		2															3											
Teamsters.....	36	7		2		1	1	1		10				1				1	1				4	1	1	6				1
Waiters.....	3					1						1											1							
Watchmen.....	9	1		3	1						2												2							
Total.....	648	75	11	42	2	7	5	10	17	26	130	5	2	5	2	1	2	14	88	8	3	61	13	17	3	73	1	9	16	

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1901.—Continued.

OCCUPATIONS.	Whole Number.	CAUSES OF DEATH.																											
		Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhoea and Dysentery.	Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid, etc.?	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
Servants.....	19	1	4						3	3	1								1			4				2			
Sisters of Mercy.....	1																		1										
Stenographers.....	1								1																				
Storekeepers.....	1																												
Tailoresses.....	2					1													1										
Teachers.....	6								1										1	2	1							1	
Typewriters.....	1																												1
Total.....	143	7	6	1	3	3	3	1	5	4	5	2						1	18	3	1	20	1	1		7		1	1

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1901.—(RECAPITULATION.)

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhoea and Dysentery.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
I. TILLERS OF THE SOIL	196	8	4	25	..	4	..	5	5	5	14	15	4	1	..	1	2	26	5	..	15	2	17	1	35	..	2	4
II. PROFESSIONAL AND PERSONAL...	93	5	..	10	..	1	2	1	2	8	19	..	1	2	1	..	1	14	1	1	8	1	2	..	9	..	2	2
III. OPTIONAL ACTIVITY... ..	194	9	4	26	..	4	1	4	3	8	18	11	1	1	..	..	6	27	4	1	29	3	6	..	22	..	3	3
IV. OUTDOOR.— <i>Local</i>	132	18	1	16	..	2	..	..	..	5	13	2	3	2	..	..	1	18	2	11	6	3	4	14	4	..	5	2
V. INDOOR.— <i>Active</i>	302	21	2	32	4	3	3	6	4	14	50	6	..	6	..	..	2	37	7	1	42	9	3	2	36	1	3	8

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1901.—(RECAPITULATION.)—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel, Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Diarrhea and Dysentery.	Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
VI.																													
INDOOR.— <i>Activity Restricted</i> ..	363	25	7	19	1	1	2	3	9	11	105	3	4	5	1	1	1	16	45	3	2	41	9	8	2	31	1	3	5
VII.																													
OCCUPATIONS AT LARGE.....	648	75	11	42	2	7	5	10	17	26	130	5	2	5	2	1	2	14	88	8	3	61	13	17	3	73	1	9	16
VIII.																													
EMPLOYMENTS OF WOMEN.....	143	7	..	6	1	..	3	3	1	15	46	5	2	..	..	..	..	1	18	3	1	20	1	1	..	7	..	1	1
ALL CLASSES.....	2,071	168	29	176	8	22	16	32	41	101	396	36	14	21	5	2	3	43	273	33	20	222	41	58	22	217	3	28	41

TABLE XII.—SUPPLEMENTAL DISEASES.—Continued.

OCCUPATIONS.	Whole Number.	Abscess, Cervical.	Abscess, Lumbar.	Abscess of Neck.	Abscess of Scrotum.	Abscess of Tonsils.	Anæmia.	Aneurism of Aorta.	Angina Pectoris.	Appendicitis.	Diphtheria.	Embolism.	Empysemæ.	Fistula.	Hernia.	Laryngitis.	Leukæmia.	Locomotor Ataxia.	Measles.	Myelitis.	Myxœdema.	Necrosis of Femur.	Neuritis.	Prostatic Disease.	Saturnism.	Smallpox.	Spinal Sclerosis.	Syphilis.	Tabes Dorsalis.	Tetanus.	Tumor of Abdomen.	Vesical Calculi.
Physicians.....	1	1								1												1										
Printers.....	1														1																	
Rubber-workers.....	1																															
Silversmiths.....	3							1	1	1					1																	
Sea Captains.....	1								1																							
Steam-pipers.....	1	1																														
Stone-cutters.....	3								1	1					1																	
Superintendents.....	4								1	2		1																				
Teamsters.....	1																															
Telegraph Operators.....	1																											1				
Treasurers.....	1														1																	
Waiters.....	1									1																						
Total.....	95	3	1	1	1	1	2	2	15	18	3	1	2	1	6	2	1	7	1	3	1	1	7	1	3	1	5	1	1	1	1	

TABLE XII.—SUPPLEMENTAL DISEASES.—Concluded.

OCCUPATIONS.	Whole Number.	Abscess, Cervical.	Abscess, Lumbar.	Abscess of Neck.	Abscess of Scrotum.	Abscess of Tonsils.	Anæmia.	Aneurism of Aorta.	Angina Pectoris.	Appendicitis.	Diphtheria.	Embolism.	Emphysema.	Fistula.	Hernia.	Laryngitis.	Leukæmia.	Locomotor Ataxia.	Measles.	Myelitis.	Myxœdema.	Necrosis of Femur.	Neuritis.	Prostate Disease.	Saturnism.	Smallpox.	Spinal Sclerosis.	Syphilis.	Tabes Dorsalis.	Tetanus.	Tumor of Abdomen.	Vesical Calculi.
FEMALES.																																
Dressmakers..	1	1								1																						
Operatives.....	1	1													1																	
Teachers.....	2	1					1											1														
Total.....	4	3	1	1	1	1	1	2	15	19	3	1	2	1	7	2	1	8	1	3	1	1	1	7	1	3	1	5	1	1	1	
Grand Total.....	99	3	1	1	1	1	3	2	15	19	3	1	2	1	7	2	1	8	1	3	1	1	1	7	1	3	1	5	1	1	1	

RESULTS AND OBSERVATIONS.

GENERAL SUMMARY.

The number of births registered in the State of Rhode Island, during the year 1901, was eleven thousand two hundred and ninety-two (11,292); the number of marriages, three thousand eight hundred and forty-six (3,846); and the number of deaths, seven thousand nine hundred and sixty-six (7,966).

TABLE XIII.

General Results of Registration for Ten Years, 1854-1863, and for each of the last Thirty-eight Years.

Years.	Whole Number of Births.	Still-born.	Living Births.	Marriages.	Deaths.
1854-1863.....	38,042.....	1,471.....	36,571.....	14,943.....	24,230.....
1864.....	3,892.....	138.....	3,754.....	1,844.....	3,360.....
1865.....	3,955.....	177.....	3,778.....	1,896.....	3,405.....
1866.....	4,902.....	172.....	4,730.....	2,318.....	2,970.....
1867.....	5,127.....	163.....	4,964.....	2,344.....	2,889.....
1868.....	5,372.....	212.....	5,160.....	2,285.....	2,912.....
1869.....	5,245.....	220.....	5,025.....	2,289.....	3,382.....
1870.....	5,215.....	234.....	4,981.....	2,262.....	3,238.....
1871.....	5,678.....	223.....	5,455.....	2,336.....	3,344.....
1872.....	6,143.....	202.....	5,941.....	2,537.....	4,247.....
1873.....	6,022.....	228.....	5,794.....	2,630.....	4,403.....
1874.....	6,466.....	277.....	6,189.....	2,541.....	4,229.....
1875.....	6,508.....	246.....	6,262.....	2,485.....	4,317.....
1876.....	6,329.....	224.....	6,105.....	2,253.....	4,116.....
1877.....	6,235.....	242.....	5,993.....	2,282.....	4,450.....
1878.....	6,714.....	248.....	6,466.....	2,324.....	4,441.....
1879.....	6,350.....	216.....	6,134.....	2,396.....	4,472.....
1880.....	6,295.....	192.....	6,103.....	2,769.....	4,820.....
1881.....	6,761.....	264.....	6,497.....	2,750.....	5,016.....
1882.....	6,825.....	253.....	6,572.....	2,634.....	5,074.....
1883.....	7,046.....	253.....	6,793.....	2,611.....	5,282.....
1884.....	7,305.....	272.....	7,033.....	2,558.....	5,141.....
1885.....	7,028.....	271.....	6,757.....	2,483.....	5,389.....
1886.....	7,621.....	293.....	7,328.....	2,750.....	5,849.....
1887.....	7,668.....	276.....	7,392.....	2,889.....	6,340.....

TABLE XIII.—Concluded.

Years.	Whole Number of Births.	Still-born.	Living Births.	Marriages.	Deaths.
1888.....	7,840.....	295.....	7,545.....	3,022.....	6,594.....
1889.....	8,220.....	320.....	7,891.....	3,029.....	6,259.....
1890.....	8,550.....	296.....	8,254.....	3,195.....	6,934.....
1891.....	9,426.....	272.....	9,154.....	3,320.....	6,620.....
1892.....	9,270.....	343.....	8,927.....	3,502.....	7,396.....
1893.....	10,048.....	412.....	9,636.....	3,544.....	7,440.....
1894.....	9,985.....	392.....	9,593.....	3,271.....	7,160.....
1895.....	10,249.....	367.....	9,882.....	3,497.....	7,535.....
1896.....	11,174.....	424.....	10,750.....	3,327.....	7,504.....
1897.....	11,218.....	423.....	10,795.....	3,137.....	7,110.....
1898.....	11,143.....	413.....	10,730.....	3,278.....	6,905.....
1899.....	11,220.....	389.....	10,831.....	3,433.....	7,458.....
1900.....	11,458.....	374.....	11,084.....	3,936.....	8,823.....
1901.....	11,761.....	469.....	11,292.....	3,846.....	7,966.....

During the period of forty-eight years there were recorded, in Rhode Island, 326,306 births, of which number 12,165 were still-born, and 314,141 were living children.

During the same period there were recorded 120,801 marriages, or 241,602 persons married; and 229,029 deaths.

These results show that in every 26.8 births there was one still-born child, or that in every 1,000 births there were about 37 still-born and 963 living children.

The same results also show that the ratio of whole number of living births to the whole number of persons married, and to the whole number of decedents respectively, during the same period, was as follows:

	Of persons married.	Of Deaths.
For every 100 living births there were.....	76.9.....	and.....72.9

The number of births in 1901 was 208 in excess of the previous year; the number of marriages 90 less, or 180 less persons married; and there was a decrease of 857 deaths.

For every 100 births there were:

	Of persons married.	Of Deaths.
In 1897.....	58.1.....	and.....65.9
In 1898.....	61.1.....	and.....64.4
In 1899.....	63.4.....	and.....68.9
In 1900.....	71.0.....	and.....79.6
In 1901.....	68.1.....	and.....70.5

TABLE XIV.

Comparative Exhibit of Births, Marriages, and Deaths in each Town in Rhode Island, in each of the Six Years 1896-1901, and Excess of Births over the Deaths in 1901.

TOWNS AND DIVISIONS OF THE STATE.	BIRTHS.						MARRIAGES.						DEATHS.						Excess of Births over Deaths.
	1896.	1897.	1898.	1899.	1900.	1901.	1896.	1897.	1898.	1899.	1900.	1901.	1896.	1897.	1898.	1899.	1900.	1901.	
Barrington	28	35	33	34	22	41	10	7	11	6	11	9	19	22	19	21	21	25	16
Bristol	150	143	138	141	154	142	48	40	40	51	37	31	141	130	109	144	170	121	21
Warren	105	158	139	149	185	147	29	37	36	24	37	53	60	79	84	86	106	94	53
Bristol County	283	336	310	324	361	330	87	84	87	81	85	93	220	231	212	251	297	240	90
Coventry	165	122	137	148	133	160	24	17	18	20	26	25	116	103	81	92	105	114	46
East Greenwich	76	61	39	49	18	44	20	31	31	36	17	25	60	58	53	63	70	56	12
West Greenwich	8	12	7	8	12	9	.....	.....	.....	2	1	1	10	9	9	10	18	6	3
Warwick	685	703	708	742	713	758	114	123	156	181	191	206	397	396	373	409	515	425	333
Kent County	934	898	981	947	876	971	158	171	205	239	235	257	583	536	516	574	708	601	370
Jamestown	10	15	20	14	15	20	3	4	2	2	3	6	8	17	12	20	19	14	6
Little Compton	19	15	17	31	21	25	5	11	7	8	5	5	22	22	17	18	27	19	6
Middletown	29	39	25	31	33	34	4	5	3	4	1	3	20	11	15	21	22	14	20
Newport City	607	556	577	594	599	576	157	155	150	161	206	163	380	370	349	391	423	386	100
New Shoreham	7	16	20	21	13	13	11	4	10	8	10	13	23	24	17	23	33	14	1
Portsmouth	31	33	36	33	37	54	8	7	6	13	14	6	29	18	28	38	34	31	23
Tiverton	71	45	35	77	66	60	16	20	11	20	18	14	50	49	56	53	52	69	9
Newport County	774	719	730	811	784	782	304	206	189	216	257	212	532	511	494	564	610	547	235

TABLE XIV.—Concluded.

TOWNS AND DIVISIONS OF THE STATE.	BIRTHS.					MARRIAGES.					DEATHS.					Excess of Births Over Deaths.			
	1896.	1897.	1898.	1899.	1900.	1901.	1896.	1897.	1898.	1899.	1900.	1901.	1896.	1897.	1898.		1899.	1900.	1901.
Burrillville.....	129	131	167	160	131	130	23	35	32	28	35	51	99	92	95	109	111	96	34
CENTRAL FALLS.....	576	511	563	556	610	516	125	119	148	138	161	154	327	223	218	254	352	300	216
Cranston.....	270	232	227	236	280	286	61	50	69	64	66	47	159	168	172	155	188	194	92
Cumberland.....	265	237	238	254	236	238	63	51	62	48	60	83	168	166	146	149	154	143	95
East Providence.....	259	267	232	265	252	276	56	60	74	64	73	92	156	163	123	141	211	162	114
Foster.....	24	22	21	22	15	27	12	13	15	5	10	4	17	28	17	32	19	25	4
Glocester.....	29	24	23	23	23	23	9	7	7	9	11	7	36	30	27	36	32	30	7
Johnston.....	280	364	197	138	149	117	42	45	17	23	12	8	222	204	130	78	70	57	60
Lincoln.....	262	289	221	273	254	265	63	50	63	33	57	57	123	110	115	103	148	148	117
North Providence.....	63	52	67	55	59	43	8	4	4	1	6	6	31	38	35	35	42	40	3
North Smithfield.....	70	82	81	58	55	50	10	25	19	19	19	12	54	52	52	32	39	37	13
PAWTUCKET.....	938	988	1,067	970	1,025	1,019	353	291	270	318	418	375	616	595	543	625	792	667	352
PROVIDENCE CITY.....	4,128	4,119	4,256	4,293	4,503	4,696	1,588	1,458	1,566	1,670	1,900	1,875	2,957	2,811	2,929	3,162	3,678	3,444	1,252
Scituate.....	58	86	58	65	56	53	30	24	25	20	18	15	69	68	53	53	69	83	30
Smithfield.....	54	50	38	45	53	39	17	16	11	17	19	23	45	41	31	37	54	28	11
WOONSOCKET.....	864	861	808	842	960	988	244	223	228	262	283	287	529	465	458	533	556	479	509
PROVIDENCE COUNTY.....	8,269	8,375	8,264	8,318	8,661	8,760	2,669	2,473	2,610	2,728	3,148	3,096	5,608	5,269	5,144	5,534	6,515	5,939	2,821
Charlestown.....	17	10	16	21	16	17	5	7	7	11	3	4	22	12	15	10	17	19	2
Exeter.....	10	7	10	9	8	4	8	8	15	9	9	7	15	10	13	11	18	15	11
Hopkinton.....	45	52	47	55	48	42	33	28	25	15	28	20	47	46	49	50	44	48	6
Narragansett.....	38	28	23	16	20	14	14	10	4	4	10	10	20	20	13	21	20	17	3
North Kingstown.....	51	84	74	50	68	75	30	23	26	28	26	28	51	60	63	62	72	72	3
North Kingstown.....	100	93	113	90	74	99	43	43	31	33	43	34	94	71	83	83	99	82	17
Richmond.....	19	25	17	20	25	23	10	8	8	6	4	7	18	27	24	30	28	26	3
Westerly.....	180	168	145	170	143	175	66	76	71	63	88	78	115	125	109	93	141	115	60
WASHINGTON COUNTY.....	490	467	445	431	402	449	209	203	187	169	211	188	382	371	369	360	439	394	55
STATE INSTITUTIONS.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	179	192	170	175	254	245	.....
WHOLE STATE.....	10,750	10,795	10,730	10,881	11,084	11,292	3,327	3,137	3,278	3,433	3,936	3,846	7,504	7,110	6,905	7,458	8,823	7,966	3,326

* Exclusive of Deaths in State Institutions.

The varying numbers of the events of births, marriages, and deaths occurring in the different towns during each of the six years ending December 31, 1901, are very concisely presented in Table XIV, and a ready means is thereby afforded of comparing and studying the changes in the vital movements of the people in the different precincts during those years.

The actual increase of population in the State, for the ten years 1890 to 1900, was 83,048, or 24.0 per cent., or an annual average of two and four-tenths per cent. The increase by immigration must have been nearly twice as large as the natural increase.

TABLE XV.

Births, Marriages, and Deaths in Rhode Island, in 1901, with the number and ratio of each in every 1,000 of the population of each town, and the ratio of excess of the births over the deaths in every 1,000 of the population.

TOWNS AND DIVISIONS OF THE STATE.	Population in 1901.	Births.	Births per 1,000 of population.	Marriages.	Persons married per 1,000 of population.	Deaths.	Deaths per 1,000 of population.	Excess of Births per 1,000.
Barrington	1,111	41	36.9	9	16.2	25	22.5	14.4
Bristol	7,090	142	20.0	31	8.7	121	17.1	2.9
Warren	5,195	147	28.3	53	20.4	94	18.1	10.2
BRISTOL COUNTY	13,396	330	24.6	93	13.9	240	17.9	6.7
Coventry	5,324	160	30.1	25	9.4	114	21.4	8.7
East Greenwich	2,754	44	16.0	25	18.2	56	20.3	-4.3
West Greenwich	592	9	15.2	1	3.4	6	10.1	5.1
Warwick	21,802	758	34.8	206	18.9	425	19.5	15.3
KENT COUNTY	30,472	971	31.9	257	16.9	601	19.7	12.2
Jamestown	1,622	20	12.3	6	7.4	14	8.6	3.7
Little Compton	1,137	25	22.0	5	8.8	19	16.7	5.3
Middletown	1,497	34	22.7	3	4.0	14	9.4	13.3
NEWPORT CITY	22,403	576	25.7	165	14.7	386	17.2	8.5
New Shoreham	1,410	13	9.2	13	12.4	14	9.9	-0.7
Portsmouth	2,130	54	25.4	6	5.6	31	14.6	10.8
Tiverton	3,003	60	20.0	14	9.3	69	23.0	-3.0
NEWPORT COUNTY	33,202	782	23.5	212	12.8	547	16.5	7.0
Burrillville	6,375	130	20.4	51	16.0	96	15.1	5.3
CENTRAL FALLS	18,585	516	27.8	154	16.6	300	16.1	11.7
Cranston *	11,630	286	24.6	47	8.1	194	16.7	7.9
Cumberland	8,970	238	26.5	83	18.5	143	15.9	10.6
East Providence	12,533	276	22.0	92	14.7	162	12.9	9.1
Foster	1,135	21	18.5	4	7.0	25	22.0	-3.5
Glocester	1,403	23	16.4	7	10.0	30	21.4	-5.0
Johnston	3,918	117	29.9	8	4.1	57	14.5	15.4
Lincoln	9,015	265	29.4	57	12.6	148	16.4	3.0
North Providence	3,115	43	13.8	6	3.9	46	14.8	-1.0
North Smithfield	2,345	50	21.3	12	10.2	37	15.8	5.5
PAWTUCKET	40,435	1,019	25.2	375	18.5	667	16.5	8.7
PROVIDENCE CITY	180,355	4,696	26.0	1,875	20.8	3,444	19.1	6.9
Scituate	3,364	53	15.8	15	8.9	83	24.7	-8.9
Smithfield	2,061	39	18.9	23	22.3	28	13.6	5.3
WOONSOCKET	28,931	988	33.9	287	19.8	479	16.5	17.4
PROVIDENCE COUNTY	334,170	8,760	26.2	3,096	18.5	5,939	17.8	8.4
Charlestown	985	17	17.2	4	8.1	19	19.3	-2.1
Exeter	884	4	4.8	7	16.7	15	18.0	-13.2
Hopkinton	2,589	42	16.2	20	15.4	48	18.5	-2.3
Narragansett	1,542	14	9.1	10	13.0	17	11.0	-1.9
North Kingstown	4,147	75	18.1	28	13.5	72	17.4	0.7
South Kingstown	5,080	99	19.5	34	13.4	82	16.1	3.4
Richmond *	1,498	23	15.4	7	9.3	26	17.4	-2.0
Westerly	7,652	175	22.9	78	20.4	115	15.0	-7.9
WASHINGTON COUNTY	24,327	449	18.5	188	15.5	394	16.2	2.3
STATE INSTITUTIONS	2,321					245	105.6	.....
WHOLE STATE	437,888	11,292	25.8	3,846	17.6	7,966	18.2	7.6

* Not including State Institutions.

In Table XV, on the preceding page, may be found the varying proportions of the number of births, marriages, and deaths, to every 1,000 of the population in the various towns and cities in the State, as they occurred in 1901.

BIRTHS.

Proportion to Population.

In regard to births, the extreme range of proportion to population was from 4.8 in every 1,000, in Exeter, to 36.9 in Barrington. Following Barrington, in the line of largest proportion, are Warwick, with 34.8; Woonsocket, with 33.9; and Johnston, with 29.9. Following Exeter, in the line of smallest proportion of births to population, are Narragansett, with 9.1 in every 1,000; New Shoreham, with 9.2; and Jamestown, with 12.3.

The proportions of births to population, in all the counties entire, and in the cities of Central Falls, Newport, Pawtucket, Providence, Woonsocket, and the whole State, during the last seven years, are as follows:

BIRTHS TO EVERY 1,000 PERSONS.

	1901	1900	1899	1898	1897	1896	1895
Bristol County.....	24.6	27.5	22.7	22.0	27.1	23.0	25.2
Kent County.....	31.9	29.2	27.8	29.6	28.0	30.1	25.2
Newport County.....	23.5	24.0	24.2	22.9	22.8	24.8	24.8
Newport City.....	25.7	27.2	26.7	26.1	25.4	27.9	26.9
Providence County.....	26.2	26.5	26.4	26.8	27.9	28.3	26.8
Central Falls.....	27.8	33.6	31.0	32.2	30.2	35.2	....
Pawtucket.....	25.2	26.1	26.1	29.5	28.3	27.5	28.4
Providence City.....	26.0	25.6	25.9	27.6	27.2	27.8	27.5
Woonsocket.....	33.9	34.0	29.5	29.3	32.5	33.9	32.4
Washington County.....	18.5	16.6	16.8	17.5	18.5	19.6	17.9
Whole State.....	25.8	25.9	25.6	25.9	26.8	27.3	25.7

PERSONS MARRIED.

Proportion to Population.

The proportion to the population, of persons married, can be more correctly shown in counties, or in cities and aggregates of towns, than in single towns.

The following summary will present the proportions in the manner suggested, for the last seven years:

PERSONS MARRIED IN EVERY 1,000.

	1901	1900	1899	1898	1897	1896	1895
Bristol County.....	13.9	12.9	11.3	12.3	13.5	14.0	14.2
Kent County.....	16.9	15.7	14.0	12.4	10.7	10.2	11.2
Newport County.....	12.8	15.8	13.5	11.9	13.1	13.1	15.2
Newport City.....	14.7	18.7	14.5	13.6	14.1	14.4	17.1
Providence County.....	18.5	19.3	17.3	17.0	16.5	18.2	19.6
Central Falls.....	16.6	17.7	15.4	16.9	14.1	15.3	.....
Pawtucket.....	18.5	21.3	17.1	14.9	16.7	20.9	21.2
Providence City ..	20.8	21.6	20.1	20.3	27.2	21.4	22.2
Woonsocket.....	19.8	20.0	18.3	16.5	32.5	16.8	20.4
Washington County.....	15.5	17.5	13.2	14.7	18.5	16.7	17.2
Whole State	17.6	18.4	16.2	15.8	26.8	17.0	18.2

DEATHS.

Proportion to Population.

The number of deaths, in proportion to the living population, varies considerably from year to year in the different towns. The smaller the towns the greater generally is the annual variation.

The highest rate occurred in Scituate, that is, 24.7 in every 1,000 of the population; followed by Tiverton, 23.0, and Barrington, 22.5.

The lowest death rate was in Jamestown, that is, 8.6 in every 1,000 of the population; followed by Middletown, with 9.4, and New Shoreham, with 9.9.

The following summary will give the ratios of mortality to the population in the cities and counties of the State, during the seven years ending December 31, 1901:

DEATHS IN EVERY 1,000 OF POPULATION.

	1901	1900	1899	1898	1897	1896	1895
Bristol County.....	17.9	22.6	17.6	15.0	18.6	17.9	20.9
Kent County.....	19.7	23.6	16.8	15.6	16.7	18.8	17.4
Newport County.....	16.5	18.7	17.6	15.5	16.2	17.0	15.9
Newport City.....	17.2	19.2	17.6	15.8	16.9	17.5	16.5
Central Falls.....	16.1	19.4	14.1	12.5	13.2	19.9	.....
Pawtucket.....	16.5	20.2	14.4	15.0	17.7	18.3	20.1
Providence City.....	19.1	20.9	19.1	12.5	18.6	19.9	21.2
Woonsocket.....	16.5	19.7	18.6	16.6	17.5	20.8	18.3
Providence County.....	17.8	19.9	17.6	16.7	17.6	19.2	20.1
Washington County.....	16.2	18.2	14.1	14.5	14.7	15.3	15.0
Whole State	18.2	20.6	17.6	16.7	17.6	19.1	19.6

The proportion of deaths to the living population in 1901 was smaller than the annual average of the previous six years in nearly every county and city in the State.

TABLE XVI.

Proportion of Births, Marriages, and Deaths to the Population, in the Whole State, in each of the last thirty-three years.

YEARS.	Popu- lation.	BIRTHS.		MARRIAGES.		DEATHS.		
		Number.	Of popu- lation, one birth in every	Number.	Of popu- lation, one per- son mar- ried in every	Number.	Of popu- lation, one death in every	Deaths in every 1,000 of the popu- lation.
1869.....	211,380	5,245	40.3	2,289	46.2	3,382	62.5	16.0
1870.....	218,555	5,215	41.9	2,362	46.2	3,238	67.5	14.8
1871.....	225,968	5,676	39.8	2,336	48.4	3,344	67.6	14.8
1872.....	233,637	6,143	38.0	2,537	46.0	4,247	55.0	18.2
1873.....	241,561	6,022	40.1	2,630	45.9	4,403	54.8	18.2
1874.....	249,765	6,466	38.6	2,541	49.1	4,229	50.0	16.9
1875.....	258,239	6,508	39.7	2,485	52.0	4,317	59.8	16.7
1876.....	262,513	6,329	41.5	2,253	58.3	4,116	63.8	15.7
1877.....	266,850	6,235	42.8	2,282	58.4	4,450	60.0	16.7
1878.....	271,269	6,714	40.4	2,324	58.4	4,441	61.1	16.4
1879.....	275,753	6,350	43.4	2,396	57.5	4,472	61.7	16.2
1880.....	280,319	6,295	44.5	2,769	50.6	4,829	58.0	17.2
1881.....	284,960	6,761	42.1	2,750	51.8	5,016	56.8	17.6
1882.....	289,667	6,825	42.4	2,634	55.0	5,074	57.1	17.5
1883.....	294,460	7,046	41.8	2,611	56.4	5,282	55.7	17.9
1884.....	299,329	7,305	41.0	2,558	58.5	5,141	58.2	17.2
1885.....	304,284	7,028	43.3	2,488	61.2	5,389	56.5	17.7
1886.....	311,507	7,621	40.9	2,750	56.6	5,848	53.3	18.8
1887.....	318,907	7,668	41.6	2,839	56.2	6,340	50.3	19.9
1888.....	326,477	7,840	41.6	3,022	54.0	6,594	49.5	20.2
1889.....	334,223	8,220	40.7	3,029	55.2	6,259	53.4	18.7
1890.....	342,169	8,550	40.0	3,195	53.5	6,934	49.3	20.3
1891.....	350,292	8,426	37.2	3,320	52.8	6,620	52.9	18.9
1892.....	358,608	9,270	38.7	3,502	51.2	7,396	48.5	20.6
1893.....	367,125	10,048	36.5	3,544	51.9	7,440	49.3	20.2
1894.....	375,836	9,985	37.6	3,271	57.4	7,160	52.5	19.1
1895.....	384,758	9,882	38.9	3,497	55.0	7,535	51.1	19.6
1896.....	393,891	10,750	36.6	3,327	59.2	7,504	52.5	19.1
1897.....	403,245	10,795	37.4	3,137	64.3	7,110	56.7	17.6
1898.....	414,413	10,730	38.6	3,278	65.2	6,905	60.0	16.7
1899.....	422,620	10,831	39.0	3,433	61.5	7,458	56.7	17.6
1900.....	428,556	11,084	38.7	3,936	54.4	8,823	48.6	20.6
1901.....	437,888	11,292	38.8	3,846	56.9	7,966	55.0	18.2

During the ten years 1871-1880, the average annual birth rate was one birth to every 39.7 of the population, or 25.2 births in every 1,000; during the ten years 1881-1890, the average birth rate was one birth in every 41.0 of the population, or 24.3 in every 1,000, a falling off of a proportion of nearly one birth in every 1,000 of the population.

From 1891 to 1900 the average annual birth rate was one birth in every 37.9 of the population, or 26.2 in every 1,000.

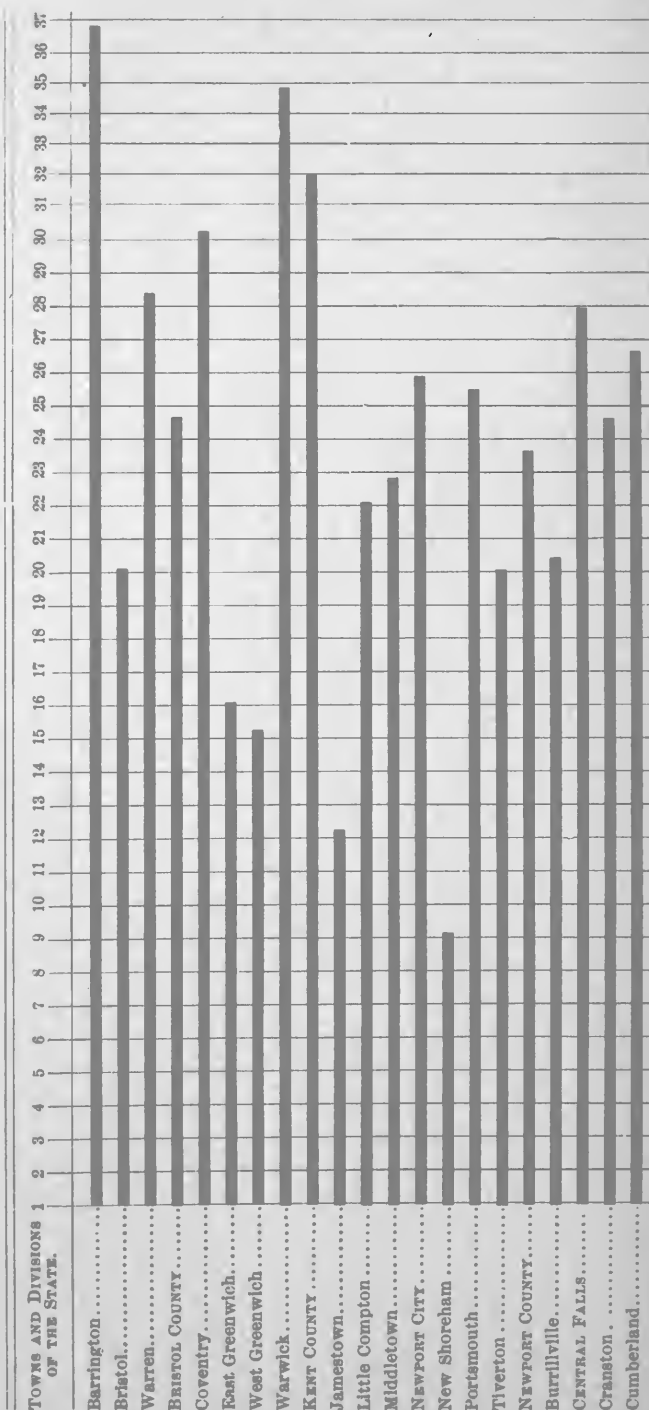
During the period of ten years 1871-1880, the average annual death rate was one in every 58.4 of the population, or 17.2 in every 1,000, according to the returns. During the ten years 1881-1890, the average annual death rate was one in every 53.4 of the population, or 18.8 in every 1,000 of the living. From 1891 to 1900 the average annual death rate was one in every 52.9 of the population, or 19.0 in every 1,000 of the living.

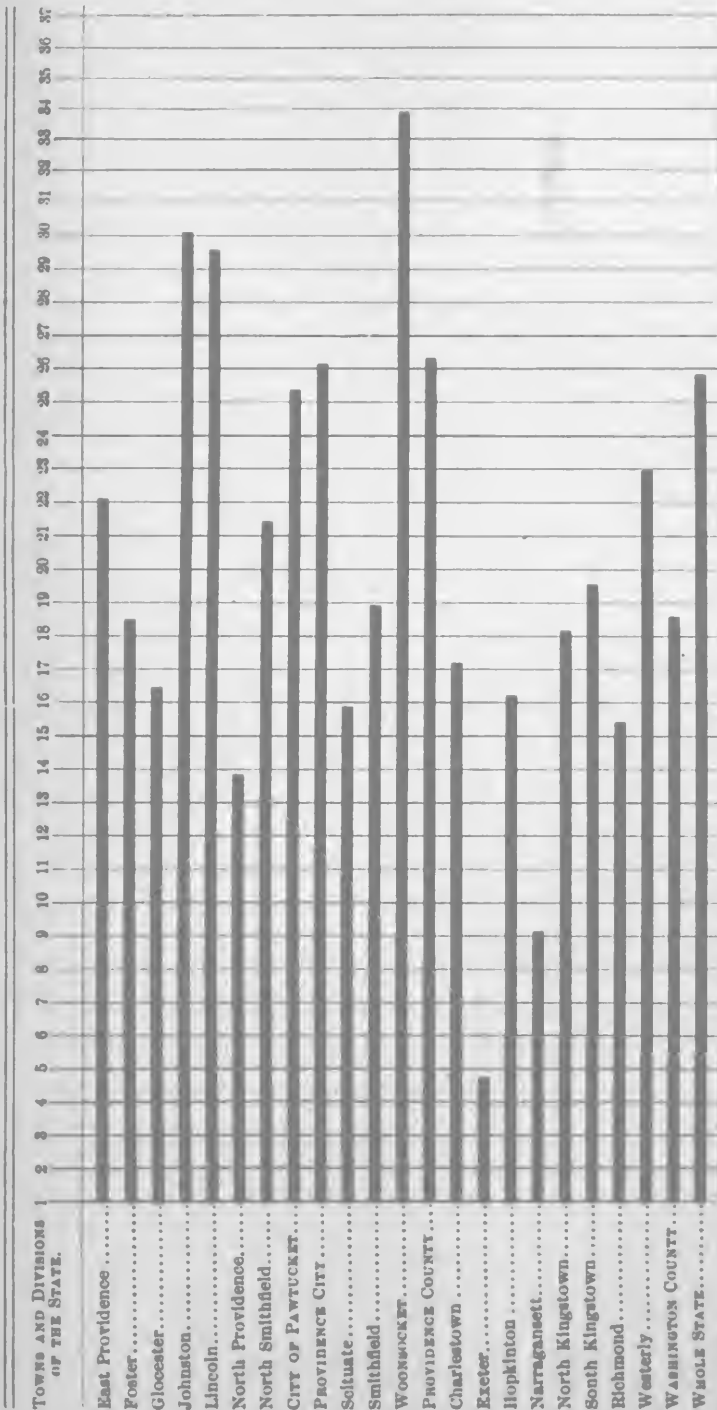
It must be remembered, however, that the returns during the last ten years have been more complete than in previous years.

BIRTH RATES.

Diagram 1.—Showing the Number of Births in every 1,000 of the Population, in each Town and each County in the State, during the Year 1901, computed upon an estimated increase of the Population by the Census of 1900.

For explanation see foot-note on next page.





The figures at the top of the perpendicular lines indicate, in whole numbers, the number of births during the year in every 1,000 persons. The spaces are fractional parts of one. For instance, the heavy horizontal line against Barrington, at the top of this diagram, reaches across nine-tenths of the space between the perpendicular lines 36 and 37. It shows the death rate of Barrington, in 1901, was thirty-six and nine-tenths in every 1,000 of the population.

BIRTHS, 1901.

The general statistics of births in Rhode Island, during the year 1901, derived from the returns sent to the office of the State Registrar, may be found on pages 2 to 8, inclusive, in Tables I, II, and III.

The whole number reported is 11,292, as before stated, and is 208 more than the number in 1900.

SEX OF THE CHILDREN.

Of the 11,292 children whose births were registered in 1901 there were 5,944 males and 5,348 females. This gives 111.1 males to each 100 females, or 526.4 males and 473.6 females in each 1,000 children.

The following table shows the number and sex, and the proportions of each sex, of the children born in Rhode Island, during the ten years 1854-1863, and in each of the last thirty-eight years :

TABLE XVII.

Years.	Males.	Females.	Males to each 100	Per 1,000 Births.
			Females.	Males. Females.
1854-1863	19,386	18,686	103.6, or	508.8 and 491.2
1864	1,949	1,942	100.3, or	500.9 and 499.1
1865	2,096	1,857	112.9, or	530.2 and 469.8
1866	2,546	2,356	108.0, or	519.4 and 480.6
1867	2,665	2,464	107.0, or	518.7 and 481.3
1868	2,745	2,637	104.5, or	511.0 and 489.0
1869	2,685	2,560	104.9, or	511.9 and 488.1
1870	2,679	2,536	105.6, or	513.7 and 486.3
1871	2,878	2,800	102.8, or	506.9 and 493.1
1872	3,085	3,058	100.8, or	502.2 and 497.8
1873	3,135	2,887	108.6, or	520.6 and 579.4
1874	3,311	3,155	104.9, or	512.1 and 487.9
1875	3,362	3,146	106.9, or	516.6 and 483.4
1876	3,291	3,038	108.3, or	520.0 and 480.0
1877	3,163	3,072	103.0, or	507.3 and 492.7
1878	3,402	3,312	102.7, or	506.7 and 493.3
1879	3,259	3,091	102.4, or	513.2 and 486.8
1880	3,241	3,054	106.8, or	514.8 and 485.2
1881	3,498	3,263	107.2, or	517.3 and 482.7
1882	3,509	3,316	105.8, or	514.1 and 485.9
1883	3,548	3,498	101.4, or	503.5 and 496.5
1884	3,713	3,592	103.4, or	508.3 and 491.7
1885	3,591	3,437	104.4, or	510.3 and 489.7
1886	3,897	3,724	104.6, or	511.3 and 488.7
1887	3,968	3,700	107.2, or	517.5 and 482.5
1888	4,023	3,817	105.4, or	513.1 and 486.0

TABLE XVII.—Concluded.

Years.	Males.	Females.	Males to each 100		Per 1,000 Births.	
			Females.		Males.	Females.
1889.....	4,193.....	4,027.....	104.1, or		510.0 and	490.0
1890.....	4,351.....	4,199.....	103.5, or		508.8 and	491.2
1891.....	4,926.....	4,500.....	199.5, or		522.6 and	477.4
1892.....	4,765.....	4,505.....	105.8, or		514.1 and	485.9
1893.....	5,105.....	4,943.....	103.3, or		508.1 and	491.9
1894.....	5,129.....	4,856.....	105.6, or		513.7 and	486.3
1895.....	5,136.....	4,746.....	108.2, or		519.7 and	480.3
1896.....	5,461.....	5,289.....	103.3, or		508.0 and	492.0
1897.....	5,493.....	5,302.....	103.6, or		508.8 and	491.2
1898.....	5,443.....	5,287.....	102.9, or		507.3 and	492.7
1899.....	5,591.....	5,240.....	106.7, or		516.2 and	488.8
1900.....	5,625.....	5,459.....	103.0, or		507.5 and	492.5
1901.....	5,944.....	5,348.....	111.1, or		526.4 and	473.6

The average proportion for forty-eight years is 104.9 males to every 100 females. At the end of five years from birth the number of each sex is about equal, the males having a larger mortality during that period.

PROPORTION OF THE SEXES. *Localities.*

In Table II, on pages 6 and 7, will be found the number of children born in the different divisions of the State during the year 1901, together with the number of each sex.

The following table will give more concisely the whole number of children born, arranged according to sex and locality, and the proportion of male children to every 100 female children :

TABLE XVIII.

BIRTHS, 1901.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Washington County.	Newport City.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Whole State.
Males.....	188	523	116	769	220	307	293	509	2,483	536	5,944
Females.....	142	448	90	772	229	269	223	510	2,213	452	5,348
Total.....	330	971	206	1,541	449	576	516	1,019	4,696	988	11,292
Males to each 100 females	132.4	116.7	128.9	99.6	96.1	114.1	131.4	99.8	112.2	118.6	111.1

Compared with the previous year, the increase in the proportion of male births in the whole State was 8.1 per cent.

The following table exhibits the proportions of births of the sexes for the past thirty-nine years in the larger divisions of the State and in the whole State :

TABLE XIX.

Number of Males to each 100 Females.

BIRTHS.	Bristol County.	Kent County.	Newport County.*	Providence County Towns.†	Providence City.	Washington County.	Whole State.
1863.....	120.0	98.4	97.0	101.8	111.4	108.7	105.8
1864.....	106.8	87.3	90.6	107.4	97.3	103.4	100.3
1865.....	119.3	118.2	108.8	118.8	113.8	88.1	112.9
1866.....	109.4	113.1	103.4	104.9	108.4	124.0	108.7
1867.....	115.5	98.3	117.8	106.3	104.5	120.4	107.7
1868.....	117.4	88.7	100.2	101.6	102.4	136.5	104.5
1869.....	115.7	116.7	102.7	98.0	107.5	120.6	104.9
1870.....	126.4	111.6	100.0	105.1	104.9	99.5	105.6
1871.....	131.8	97.9	132.5	100.8	95.2	113.3	102.8
1872.....	109.2	92.8	109.1	103.5	95.7	110.6	100.9
1873.....	129.2	113.0	117.9	104.5	109.0	104.7	108.6
1874.....	98.7	111.9	101.3	110.4	102.9	94.0	104.9
1875.....	95.2	103.1	97.7	104.3	109.1	134.3	106.9
1876.....	142.1	104.4	108.5	108.0	106.8	103.7	108.3
1877.....	138.7	102.4	98.5	100.3	104.9	95.3	103.0
1878.....	120.5	120.6	94.8	101.5	106.8	78.8	102.7
1879.....	124.3	95.5	103.6	105.4	105.7	106.3	105.4
1880.....	117.2	110.5	113.5	102.4	107.6	95.4	106.1
1881.....	91.2	111.3	102.0	105.9	109.0	115.7	107.2
1882.....	94.7	110.2	112.5	103.1	106.5	105.7	105.8
1883.....	94.0	97.6	97.0	103.5	102.2	102.2	101.4
1884.....	105.0	111.7	92.9	102.5	105.8	99.0	103.4
1885.....	132.2	107.3	98.0	104.8	103.6	104.3	104.4
1886.....	120.0	81.7	102.6	106.7	105.0	121.7	104.6
1887.....	115.1	121.7	106.6	103.9	107.9	106.7	107.2
1888.....	98.1	105.1	105.0	103.4	107.4	110.2	105.4
1889.....	81.9	122.0	107.5	103.6	101.4	110.2	104.1
1890.....	96.5	113.0	106.8	108.5	98.3	97.4	103.6
1891.....	107.1	110.4	118.4	107.0	109.1	106.4	109.5
1892.....	120.0	102.1	102.4	110.7	100.0	98.5	105.8
1893.....	90.7	101.8	97.7	104.1	104.1	109.0	105.8
1894.....	103.4	102.4	121.1	110.2	99.6	106.5	105.6
1895.....	118.4	116.3	100.8	105.0	109.6	115.6	108.2
1896.....	96.5	95.4	103.7	102.4	105.8	108.5	103.3
1897.....	101.2	108.4	97.5	103.9	104.4	96.2	103.6
1898.....	96.2	104.4	98.9	101.6	105.2	102.3	102.9
1899.....	121.9	103.2	114.0	106.8	102.9	129.2	106.7
1900.....	114.9	100.9	113.0	99.3	104.5	102.0	103.0
1901.....	132.4	116.7	117.8	111.0	112.2	96.1	111.1

*Including city of Newport. †Including cities of Central Falls, Pawtucket, and Woonsocket.

There will be found in the following summary, in the aggregate, the average number of males to each 100 females, born during the thirty-nine years from 1862-1901, in the different divisions of the State:

Bristol County.....	112.0 males to each 100 females.
Kent County.	108.6 males to each 100 females.
Newport County*.....	108.3 males to each 100 females.
Providence County Towns†	107.7 males to each 100 females.
Providence City	107.8 males to each 100 females.
Washington County	110.0 males to each 100 females.
Whole State	108.2 males to each 100 females.

BIRTHS AND SEASON.

Table II, on pages 6 and 7 of this report, gives the number of births occurring in the different months of the year, in the several divisions of the State.

According to this table, the greatest number of births in any one month, in 1901, occurred in August, and the largest in any quarter in the third.

The following table shows the total number of children born in the State of Rhode Island, according to the returns, in each quarter of each of the last six years; and also the aggregate number and the percentage of the aggregate of each quarter in forty-eight years, from 1854 to 1901, inclusive:

TABLE XX.

QUARTERS.	1901.	1900.	1899.	1898.	1897.	1896.	1854-1901, inclusive.	
							Number.	Per cent.
January—March	2,751	2,736	2,693	2,686	2,749	2,604	77,024	23.81
April—June	2,612	2,581	2,549	2,562	2,386	2,461	76,346	23.60
July—September	3,010	2,921	2,791	2,802	2,983	2,790	84,765	26.21
October—December	2,919	2,846	2,798	2,680	2,677	2,895	85,312	26.38
Whole Year	11,292	11,084	10,831	10,730	10,795	10,750	323,447	100.00

Table XX presents results showing that, according to the registration of forty-eight years, the average proportions of births to

* Including city of Newport. † Including cities of Central Falls, Pawtucket, and Woonsocket.

the whole number of births in the different quarters of the year were as follows:

January—March	238.1 in every 1,000 births.
April—June.....	236.0 in every 1,000 births.
July—September.....	262.1 in every 1,000 births.
October—December.....	263.8 in every 1,000 births.

The proportions of births in Rhode Island, in the different quarters of the year, to the whole number of births in 1901, were as follows:

1. January—March.....	24.4 per cent., or.....	244 in every 1,000
2. April—June.....	23.1 per cent., or.....	231 in every 1,000
3. July—September.....	26.7 per cent., or.....	267 in every 1,000
4. October—December.....	25.8 per cent., or.....	258 in every 1,000
First six months.....	475 births in every 1,000 of whole number.	
Second six months	525 births in every 1,000 of whole number.	

BIRTHS. *Sex and Season.*

In Table II, on pages 6 and 7, will also be found the number of births of *each sex* by months, as they occurred in the different divisions of the State, during the year 1901. From it we ascertain the number of *each of the sexes* born during each quarter of the year, with their relative proportions, and also the aggregates and proportions of the same for the whole State.

The following table will present a summary of the quarterly periods, number of births, and proportions of the sexes, for the same year:

	Males.	Females.	Males to each 100	Per 1,000 each quarter.	
			Females.	Males.	Females.
1. January—March.....	1,450	1,301	111.4	527	473
2. April—June.....	1,371	1,241	110.5	525	475
3. July—September.....	1,579	1,431	110.3	525	475
4. October—December.....	1,544	1,375	112.3	529	471
Whole Year.....	5,944	5,348	111.1	526	474

The following table shows the number of male children born to every 100 female children, in each quarter of the last three years; and also the proportion of births of male children to each 100 female children born during seven periods of five years each, from 1866 to 1900 inclusive:

TABLE XXI.

YEARS.	1901.	1900.	1899.	5 years, 1896 to 1900.	5 years, 1891 to 1895.	5 years, 1886 to 1890.	5 years, 1881 to 1885.	5 years, 1876 to 1880.	5 years, 1871 to 1875.	5 years, 1866 to 1870.
First Quarter.....	111.4	107.4	106.2	103.8	104.6	104.3	105.8	106.0	101.5	106.6
Second Quarter.....	110.5	105.0	107.9	105.1	107.3	105.4	104.8	102.7	104.7	107.3
Third Quarter.....	110.3	97.9	106.9	102.8	108.6	104.6	105.1	107.1	104.8	106.0
Fourth Quarter.....	112.3	102.6	105.9	104.2	105.8	106.5	102.5	108.2	106.5	104.8
Total Average.....	111.1	103.0	106.7	103.9	106.5	105.2	104.5	106.2	104.2	106.2

The above table shows the variation of the proportions of the sexes in the different quarters in the different years, and seems to conclusively determine that season has very little, if any, influence in the causation of sex.

PARENTAGE.

By reference to Table I, page 4, in the division of births, there will be found the parentage of the children born in Rhode Island during the year 1901. It will be seen that of the whole number, 11,292, there were 3,426 of native, 5,629 foreign, and 2,237 of mixed parentage.

By mixed parentage is meant the children born of native fathers and foreign mothers, and of foreign fathers and native mothers.

Of native fathers and foreign mothers there were 1,063, and of foreign fathers and native mothers, 1,174.

The following table will show the number and parentage of the children born in the State and the variations of the same from year to year, in each of the last three years; and also the number and variations occurring in four periods of five years each, and two of ten years each, from 1858 to 1901, inclusive:

TABLE XXII.

PARENTAGE.	1901.	1900.	1899.	5 years, 1893 to 1897.	5 years, 1888 to 1892.	5 years, 1883 to 1887.	5 years, 1878 to 1882.	10 years, 1868 to 1877.	10 years, 1858 to 1867.
Native father and mother.....	3,426	3,388	3,290	16,762	16,511	15,001	14,169	25,645	20,321
Foreign father and mother.....	5,629	5,499	5,495	25,084	18,737	15,245	13,562	26,356	19,665
Native father, foreign mother.	1,063	1,078	1,031	4,819	4,021	3,044	2,327	3,135	1,690
Foreign father, native mother.	1,174	1,119	1,015	4,795	4,037	3,378	2,887	4,077	1,696
Parentage not stated.....	.....	.....	.....	.....	.....	.....	.....	.....	293
Total.....	11,292	11,084	10,831	51,460	43,306	36,668	32,945	59,213	43,665

The following table of *percentages* will show, in a different and perhaps clearer way, the same changes that have occurred in the proportions of the births in the different classes of parentage during the last four years, and during forty-four years, from 1858 to 1901, inclusive, in four periods of five years each, and two of ten years:

TABLE XXIII.

PARENTAGE.	1901.	1900.	1899.	1898.	5 years. 1893 to 1897.	5 years. 1888 to 1892.	5 years. 1883 to 1887.	5 years. 1878 to 1882.	10 years. 1868 to 1877.	10 years. 1858 to 1867.
Nat. father and mother.	30.34	30.56	30.37	31.81	32.60	38.25	40.91	43.03	43.36	46.84
For. father and mother.	49.85	49.61	50.74	49.46	48.73	43.14	41.58	41.23	44.53	45.96
Nat. father, for. mother.	9.41	9.73	9.52	9.45	9.36	9.30	8.30	6.95	5.37	3.89
For. father, nat. mother.	10.40	10.10	9.37	9.28	9.31	9.31	9.21	8.79	6.74	3.91
Total.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

The registration of births, in 1901, is of interest as continuing to show, as usual, a smaller proportion of children born of native fathers than of foreign fathers. A considerable number of those recorded as native fathers were themselves children of foreign parents.

The percentage of children of mixed parentage was about the same, in 1901, as in the previous year.

The following table will present the percentages of children of native and of foreign-born fathers, and of native and foreign-born mothers, respectively, in each of the last four years, and in each of four periods of five years each and two of ten years each, from 1858 to 1901, inclusive:

TABLE XXIV.

CHILDREN WITH	1901.	1900.	1899.	1898.	5 years. 1893 to 1897.	5 years. 1888 to 1892.	5 years. 1883 to 1887.	5 years. 1878 to 1882.	10 years. 1868 to 1877.	10 years. 1858 to 1867.
Native fathers.....	39.75	40.29	39.89	41.26	41.96	47.56	49.21	50.08	48.73	50.73
Foreign fathers	60.25	59.71	60.11	58.74	58.04	52.44	51.79	49.92	51.27	49.26
Native mothers	40.74	40.66	39.75	41.09	41.91	47.57	49.91	51.79	50.10	50.75
Foreign mothers	59.26	59.34	60.25	58.91	58.09	52.43	50.09	48.21	49.90	49.25

During 1901 the percentage of children born of foreign fathers was larger, and of foreign mothers was smaller, than in 1900.

The number of native fathers of children born, in 1901, was 2,314 less than the number of foreign fathers, and the number of native mothers was 2,092 less than of foreign.

BIRTHS OF COLORED CHILDREN.

The number of births of children of colored parentage reported for the year 1901 is 252. This number is 21 greater than in 1900, and also 51 greater than in 1899.

In regard to sex, the numbers and proportions were as follows, viz.: males, 125; females, 127; or 98.4 males to each 100 females.

As the number of colored persons in the State was, according to the census of 1900, 9,125,* the ratio of births in this class would be 27.6 per thousand, or 1 to each 36.2 colored inhabitants.

The following summary will show the changes that have occurred from year to year, in the proportions of the sexes of colored children born in Rhode Island, during the last twenty-six years:

Years.	Whole Number.	Males.	Females.	Males to each 100 Females.
1876-1885.....	1,762.....	849.....	913.....	93.0
1886.....	212.....	117.....	95.....	123.0
1887.....	211.....	111.....	100.....	111.0
1888.....	202.....	109.....	93.....	117.2
1889.....	194.....	87.....	107.....	81.3
1890.....	183.....	89.....	94.....	94.6
1891.....	173.....	86.....	87.....	98.9
1892.....	182.....	94.....	88.....	106.8
1893.....	203.....	91.....	112.....	81.3
1894.....	221.....	113.....	108.....	104.6
1895.....	221.....	117.....	104.....	112.5
1896.....	226.....	104.....	122.....	85.2
1897.....	206.....	100.....	106.....	94.3
1898.....	216.....	105.....	111.....	94.6
1899.....	201.....	105.....	96.....	109.4
1900.....	231.....	120.....	111.....	108.1
1901.....	252.....	125.....	127.....	98.4

The following table will show the location, number, sex, etc., of colored births during 1901:

* This does not include Chinese or Japanese.

TABLE XXV.

Showing Number, Sex, etc., of Colored Births, 1901.

TOWNS AND CITIES.	Whole Number.	Males.	Females.	COUNTIES.
Warwick.....	3	1	2	Kent County 3
Jamestown.....	2	.....	2	
Little Compton.....	1	1	.....
NEWPORT CITY.....	43	25	18	
Tiverton.....	1	.....	1	Newport County..... 47
CENTRAL FALLS.....	2	2	.....
Cranston	3	2	1	
East Providence	7	2	5	
PAWTUCKET	4	1	3	
PROVIDENCE CITY.. ..	155	76	79	Providence County.... 171
Charlestown	2	1	1	
Hopkinton.....	1	1	.....
Narragansett.....	1	.....	1	
North Kingstown	4	3	1	
South Kingstown	13	5	8	
Richmond.....	3	2	1	
Westerly	7	3	4	Washington County... 31
WHOLE STATE.....	252	125	127	..... 252

NUMBER OF CHILD OF THE MOTHER.

In the following table will be found the number of the child of the mother born during 1901; that is, how many of the children born were reported as the first, second, or third child, etc., of their respective mothers. The statistics on this subject begin with the year 1857, and the following table includes the children reported during the last six years, and also the total for forty-five years, 1857 to 1901, inclusive:

TABLE XXVI.

NUMBER OF THE CHILD OF THE MOTHER.	1896.	1897.	1898.	1899.	1900.	1901.	45 years, 1857-1901.
First	2,574	2,438	2,393	2,426	2,640	2,851	75,788
Second.....	2,125	2,098	2,059	2,089	1,977	2,179	61,525
Third.....	1,672	1,687	1,631	1,635	1,616	1,589	47,706
Fourth.....	1,233	1,291	1,310	1,286	1,342	1,265	36,243
Fifth.....	918	927	982	942	978	972	27,044
Sixth.....	666	712	715	753	771	724	19,953
Seventh.....	488	499	532	544	531	528	14,314
Eighth.....	337	342	378	382	378	392	10,190
Ninth.....	259	260	231	238	289	247	6,904
Tenth.....	161	180	180	176	199	179	4,729
Eleventh.....	123	132	105	130	125	128	2,982
Twelfth.....	71	89	80	86	82	79	1,925
Thirteenth.....	40	50	54	58	63	53	1,149
Fourteenth.....	26	37	33	39	34	35	625
Fifteenth.....	12	14	10	12	24	16	324
Sixteenth.....	13	6	5	7	7	10	166
Seventeenth.....	4	4	8	4	2	4	90
Eighteenth.....	3	.....	.....	.....	1	3	39
Nineteenth.....	3	2	3	1	1	.....	26
Twentieth.....	.....	.....	.....	1	1	1	11
Twenty-first.....	.....	.....	.....	1	.....	2	7
Twenty-second.....	.....	.....	.....	1	1	.....	4
Unstated.....	22	27	21	20	22	35	411
Total.....	10,750	10,795	10,730	10,831	11,084	11,292	312,155

There was an increase of 208 in the whole number of births in 1901 from the number in 1900.

There are varying differences in the proportions of all classes in the different years.

There was one return of birth in the twentieth, and two in the twenty-first classes.

The proportion of each class to the whole number will be shown by the following table, which gives the percentage of the children born in each of the last four years who were respectively the first, second, third, etc., children of the mothers; and which will also give the average percentage of each class of births in each of the last four years, and also in two periods of ten years, and two

periods of five years, comprising the thirty-four years from 1868 to 1901, inclusive :

NUMBER OF THE CHILD.	1901.	1900.	1899.	1898.	5 years, 1893 to 1897.	5 years, 1888 to 1892.	10 years, 1878 to 1887.	10 years, 1868 to 1877.
First.....	25.25	23.82	22.40	22.30	23.78	25.20	23.7	25.2
Second	19.30	17.74	19.29	19.19	19.90	19.77	19.1	20.7
Third.....	14.07	14.58	15.09	15.20	15.29	14.94	15.5	15.5
Fourth	11.20	12.11	11.87	12.20	11.45	11.10	11.7	11.4
Fifth	8.61	8.82	8.70	9.15	8.52	8.23	8.8	8.4
First to Fifth.....	78.43	77.17	77.85	78.04	78.94	79.24	78.8	81.1
Sixth and over, and unstated.....	21.57	22.83	22.65	21.96	21.06	20.76	21.2	18.9
Total.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

TABLE XXVII.

Showing the Ages of the Fathers and Mothers of Children born in 1901.

AGES OF FATHERS.	AGES OF MOTHERS.														No. of Fathers.
	14 years.	15 years.	16 years.	17 years.	18 years.	19 years.	20-25 years.	25-30 years.	30-35 years.	35-40 years.	40-45 years.	45-50 years.	50-55 years.	Unstated age.	
17 years.....			2		1										3
18 years.....				1	1	1		3							6
19 years.....		1	2	9	3	3	10								28
20-25 years.....		2	19	25	73	119	816	178	25	5					1,262
25-30 years.....		2	3	14	48	69	1,136	1,440	240	30	5				2,987
30-35 years.....					4	7	15	419	1,170	1,121	181	8	1		2,926
35-40 years.....					1	2	3	113	400	759	776	79	3		2,136
40-45 years.....							3	33	96	259	460	255	9	1	1,116
45-50 years.....							1	13	29	81	164	171	16		475
50-55 years.....								3	9	17	36	60	13		188
55-60 years.....								2	1	5	10	14	6		38
60-65 years.....									2	2	4	3			11
65-70 years.....										4					4
Unstated.....	1	3	5	9	14	11	52	22	2	4	1			38	162
No. of Mothers...	1	8	32	63	149	224	2,600	3,347	2,515	1,670	396	48	1	38	11,292

The nativity of the mothers under 19-years was as follows :

The one at 14 years was American.

Of the eight at 15 years, 4 were American, 1 French-Canadian, 2 Portuguese, and 1 Armenian.

Of the thirty-two mothers at 16 years, 26 were American, 3 French-Canadian, 2 Italian, and 1 Russian.

Of the sixty-three mothers at 17 years, 39 were American, 1 English, 9 French-Canadian, 11 Italian, and 3 Portuguese.

Of the one hundred and forty-nine mothers at 18 years, 85 were American, 3 English, 31 French-Canadian, 1 Irish, 21 Italian, 2 Portuguese, 1 Nova Scotian, 1 Roumanian, 1 Syrian, and 3 Turkish.

The 11,292 children were divided as follows, to mothers of different age periods :

	Number of Mothers.	Per cent.
Under twenty years.....	477.....	3.64
Twenty, and under twenty-five.....	2,600	22.02
Twenty-five, and under thirty.....	3,347	29.72
Thirty, and under thirty-five	2,515.....	22.82
Thirty-five, and under forty	1,670	15.42
Forty, and under forty-five.....	596.....	5.46
Forty-five and over.....	49.....	.63
Unstated age.....	38.....	.29
Total.....	11,292.....	100.00

PLURALITY BIRTHS.

The general statistics in relation to plural births, in Rhode Island, may be found on page 8, Table III.

There were one hundred and twenty-seven cases during the year, all of which were twins, thus making the number of two hundred and fifty-four children.

Of the 254 children of plural birth, 130 were males and 124 were females.

The cases occurred in the different divisions of the State as follows :

Bristol county, 2; Kent county, 8; Newport county, 2; Newport city, 10; Providence county towns, 47; Providence city, 51; Washington county, 7.

The following exhibit will show the parentage of children of plural birth in Rhode Island, in 1901, and number of each :

* Including Central Falls, Pawtucket, and Woonsocket.

Parents both native Americans.....	31
Parents both born in Armenia.....	1
" " " Austria.....	2
" " " British America.....	3
" " " England.....	4
" " " France.....	1
" " " Canada (French).....	18
" " " Germany.....	1
" " " Ireland.....	8
" " " Italy.....	15
" " " Poland.....	2
" " " Portugal.....	3
" " " Russia.....	3
" " " Sweden.....	5
American father and English mother.....	2
American father and French-Canadian mother.....	4
American father and Irish mother.....	3
American father and Scotch mother.....	1
American father and Swedish mother.....	2
British American father and American mother.....	5
British American father and Irish mother.....	1
English father and American mother.....	2
German father and American mother.....	1
Hungarian father and Russian mother.....	1
Irish father and American mother.....	2
Irish father and English mother.....	1
Irish father and French-Canadian mother.....	1
Portuguese father and American mother.....	1
Russian father and English mother.....	1
Scotch father and American mother.....	1
Swedish father and American mother.....	1

The months in which the plurality births occurred were as follows:

January.....15	April.....9	July.....12	October.....7
February.....9	May.....15	August.....9	November.....7
March.....12	June.....12	September.....10	December.....10
—	—	—	—
First Quarter.....36	Second Quarter...36	Third Quarter....31	Fourth Quarter...34
First half of year 72		Second half of year..... 55	
Total..... 127			
Total children 251			

The general statistics of births, and number of *cases* reported in Rhode Island, during a period of forty-eight years, that is, from 1854 to 1891, inclusive, are as follows:

319,411 cases of single births.....	giving 319,411 children.
3,393 cases of twin births..	giving 6,786 children.
35 cases of triple births.....	giving 105 children.
1 case of quadruple births.....	giving 4 children.

Of the whole number of *cases* of child-birth (322,840) during the forty-eight years, one in 95 produced twins, one in 9,224 produced triplets, and one in 322,840 produced quadruplets.

Of the whole number of children born during the same period (326,306), ascertained from the reports, one in every 50 was a twin; one in every 3,103 was a triplet.

Of the 3,429 *cases* of plurality births which have occurred in the State during the last forty-eight years, there were 1,250 cases in which both parents were natives; 1,687 cases in which both parents were foreign; 483 cases in which the parents were mixed, that is, one native and one foreign parent; and 9 in which the parentage was not stated.

The whole number of children born in plurality cases, during the forty-eight years, was 6,895, of whom 3,481 were males, and 3,410 were females; the sex of the remaining four was not given.

STILL-BORN.

The whole number of still-born children reported in Rhode Island, for the year 1901, was 469; this number is 95 more than for the year 1900.

The following are the numbers reported from the different divisions of the State:

Bristol County	4
Kent County	26
Newport County Towns	10
Newport City	31
Providence County Towns.....	62
Central Falls	31
Pawtucket	49
Providence City.....	216
Woonsocket.....	28
Washington County	12
Whole State	469

The following table will give the number in each town from which still-births were reported, with the sex, parentage, and color:

TABLE XXVIII.

Still-Born, 1901; Locality, Number, Sex, Parentage, and Color,

TOWNS AND DIVISIONS OF THE STATE.	Total.	SEX.		PARENTAGE.		COLOR.	
		Males.	Females.	Native.	Foreign.	White.	Colored.
Bristol	2	1	1	2	.....	2	.....
Warren.....	2	.....	2	.....	2	2	.....
BRISTOL COUNTY.....	4	1	3	2	2	4	.....
Coventry.....	5	2	3	.....	5	5	.....
East Greenwich.....	4	1	3	2	2	4	.....
Warwick.....	17	9	8	10	7	17	.....
KENT COUNTY.....	26	12	14	12	14	26	.....
Middletown	1	1	.....	.....	1	1	.....
NEWPORT CITY.....	31	19	12	17	14	29	2
New Shoreham	1	.....	1	1	.....	1	.....
Portsmouth.....	3	1	2	1	2	3	.....
Tiverton	5	4	1	3	2	5	.....
NEWPORT COUNTY.....	41	25	16	22	19	39	2
Burrillville.....	8	2	6	5	3	8	.....
CENTRAL FALLS.....	31	11	20	12	19	31	.....
Cranston.....	9	3	6	8	1	9	.....
Cumberland.....	11	4	7	4	7	11	.....
East Providence	5	3	2	4	1	5	.....
Glocester	1	.....	1	1	.....	1	.....
Johnston.....	3	3	.....	2	1	3	.....
Lincoln.....	20	16	4	3	17	20	.....
North Smithfield.....	2	2	.....	.....	2	2	.....
PAWTUCKET.....	49	23	26	22	27	49	.....
PROVIDENCE CITY.....	216	126	90	92	124	210	6
Scituate.....	3	1	2	2	1	3	.....
WOONSOCKET.....	28	13	15	11	17	28	.....
PROVIDENCE COUNTY.....	386	207	179	166	220	380	6
Hopkinton	1	.....	1	1	.....	1	.....
North Kingstown.....	5	3	2	5	.....	5	.....
South Kingstown.....	3	1	2	3	.....	2	1
Richmond.....	2	2	.....	1	1	2	.....
Westerly.....	1	.....	1	.....	1	1	.....
WASHINGTON COUNTY.....	12	6	6	10	2	11	1
WHOLE STATE	469	251	218	212	257	460	9

SUMMARY OF SEX OF STILL-BORN.

The following table shows the number and sex of the still-born children whose births were reported in Rhode Island during each of the last five years, and also of a period of forty-eight years, extending from January 1, 1854, to December 31, 1901:

TABLE XXIX.

SEX.	1901.	1900.	1899.	1898.	1897.	Jan. 1, 1854, to Dec. 31, 1901.
Males.....	251	221	210	240	258	7,152
Females.....	218	153	179	173	165	5,141
Total.....	469	374	389	413	423	12,293

The average proportions of the sexes of the still-born, for the period of forty-eight years, were as follows: In every 100 still-births there were about 58 males and 42 females.

Season of Still-Births.—During 1901 the proportions in relation to season, by percentage, were as follows:

	1901.		1901.
First Quarter.....	25.16	Third Quarter.....	22.81
Second Quarter.....	25.80	Fourth Quarter.....	26.23
Per cent. first half of the year.....	50.96	Last half of the year.....	49.04

The births of the still-born in the different months of the year, although somewhat variable in number, do not, as a rule, show great discrepancies.

PARENTAGE OF THE STILL-BORN.

Of the 469 still-born children reported in 1901 there were 212 of native and 257 of foreign parentage, reckoned by the nativity of the fathers, that is, the father's name given; and 206 of native and 263 of foreign, reckoned by the nativity of the mothers, name of father given or not given.

ILLEGITIMATES.

In the following table will be found the whole number of illegitimate births returned during 1901, with the sex, color, parentage, and locality of birth:

TABLE XXX.

Illegitimates, 1901.

TOWNS.	Whole Number.	SEX.		COLOR.		PARENTAGE.	
		Males.	Females.	White.	Black.	Native.	Foreign.
Bristol	1	.....	1	1	.....	1	.....
Warwick.....	3	1	2	.....	3	3	.....
NEWPORT CITY.	8	5	3	4	4	7	1
New Shoreham	1	.....	1	1	.....	1	.....
Portsmouth.....	2	1	2	3	.....	2	1
Tiverton	3	2	1	2	1	3	.....
Cranston	13	4	9	11	2	9	4
Cumberland.....	2	.....	2	2	.....	.....	2
PROVIDENCE CITY.....	93	43	50	83	10	59	34
Scituate.....	1	.....	1	1	.....	1	.....
WOONSOCKET.....	6	3	3	6	.....	3	3
Charlestown	1	.....	1	1	.....	1	.....
North Kingstown.....	1	1	.....	.....	1	1	.....
South Kingstown.....	3	2	1	.....	3	3	.....
Westerly.....	2	2	.....	1	1	2	.....
WHOLE STATE.....	141	64	77	116	25	96	45

There were returns, during 1901, of 141 children of illegitimate parentage. The number is 8 less than that of the previous year.

Sex.—Of the 141, there were 64 males and 77 females.

Color.—Of the 141 illegitimates born during 1901, 116, or 82.3 per cent., were white; and 25, or 17.7 per cent., were colored.

Parentage.—Of the 141, 96, or 68.1 per cent. of all, were born of native mothers; and 45, or 31.9 per cent., of foreign born mothers. The colored illegitimates were all of native parentage. There were of the 116 white illegitimates, 71 born of native mothers, and 45 of foreign mothers.

The ages of the mothers were as follows :

Age.	No. of Mothers.	Age.	No. of Mothers.
15.....	3	27.....	2
16.....	4	28.....	1
17.....	11	29.....	5
18.....	15	32.....	1
19.....	14	33.....	1
20.....	18	34.....	1
21.....	17	35.....	2
22.....	10	38.....	1
23.....	12	40.....	1
24.....	6		—
25.....	11	Total.....	141
26.....	5		

Sixty-eight of the illegitimates were born of indigent, pauper, or criminal mothers, in public, charitable, or penal institutions.

Fifty-five of these sixty-eight births occurred at the Lying-in-Hospital, in the city of Providence.

The proportion of illegitimates to the whole number of births was about one in every 80 cases, or about 13 in every 1,000.

MARRIAGES, 1901.

The number of marriages registered in Rhode Island, during the year 1901, was 3,846. This number is 413 more than in 1899, and 90 less than in 1900.

The general statistics of marriage, in 1901, in relation to season and number, in the different divisions of the State, may be found in Table IV, on the ninth page.

The statistics in relation to the proportion to population of persons married in 1901, in each of the towns and general divisions of the State, may be found in Tables XV and XVI, on pages 114 and 117.

The following table will present the number of marriages, and the ratio of marriage to population, in each year for a period of forty-two years, 1860 to 1901, inclusive :

TABLE XXXI.

YEARS.	Number Marriages.	Of Population, one Person Married in every	Persons Married per 1,000 of Population.	YEARS.	Number Marriages.	Of Population, one Person Married in every	Persons Married per 1,000 of Population.
1860.....	1,748	50.0	20.0	1882.....	2,634	52.5	19.0
1861.....	1,533	56.8	17.6	1883.....	2,611	54.4	18.3
1862.....	1,450	61.1	15.1	1884.....	2,558	58.1	17.2
1863.....	1,618	54.7	18.3	1885.....	2,488	61.3	16.3
1864.....	1,844	50.1	19.9	1886.....	2,750	56.5	17.7
1865.....	1,896	48.7	20.5	1887.....	2,839	55.8	18.0
1866.....	2,318	39.9	25.1	1888.....	3,022	53.5	18.7
1867.....	2,344	39.8	25.1	1889.....	3,029	57.8	17.3
1868.....	2,285	40.5	24.8	1890.....	3,195	54.1	18.4
1869.....	2,289	47.5	21.1	1891.....	3,320	53.5	18.5
1870.....	2,362	46.0	21.7	1892.....	3,502	52.4	19.1
1871.....	2,336	46.5	21.5	1893.....	3,544	53.6	18.7
1872.....	2,537	42.9	23.2	1894.....	3,271	57.4	17.4
1873.....	2,630	41.3	24.2	1895.....	3,497	55.0	18.2
1874.....	2,541	50.8	19.6	1896.....	3,327	59.2	17.0
1875.....	2,485	52.0	19.2	1897.....	3,137	64.3	15.6
1876.....	2,253	57.3	17.5	1898.....	3,278	63.2	15.8
1877....	2,282	56.6	17.7	1899.....	3,433	61.6	16.2
1878.....	2,324	55.7	17.9	1900.....	3,936	54.4	18.4
1879.....	2,396	57.8	17.5	1901.....	3,846	56.9	17.6
1880.....	2,769	49.9	20.0				
1881.	2,750	50.3	19.9	Annual average..		53.1	19.1

SEASON.

The following table will show the number and percentage of marriages in Rhode Island, in each month and each quarter of the year 1901, together with the aggregate number and percentage in each quarter for forty-eight years, viz., from 1854 to 1901, inclusive :

TABLE XXXII.

MONTHS.	Number of marriages, each month, 1901.	Number of Mar- riages each Quar- ter, 1901.	Percentage of each Quarter to total Marriages, 1901.	Number of Mar- riages per Quarter, 48 yrs., 1854-1901.	Percentage each Quar- ter, 48 years.
January.....	339	1st Quarter... 751	19.52	1st Quarter... 35,664	21.25
February.....	287				
March.....	125				
April.....	392	2d Quarter... 1,163	30.24	2d Quarter... 31,529	26.10
May.....	254				
June.....	517				
July.....	294	3d Quarter... 901	23.43	3d Quarter... 23,282	23.42
August.....	264				
September.....	343				
October.....	375	4th Quarter... 1,031	26.81	4th Quarter... 35,305	29.23
November.....	444				
December.....	212				
Total.....		3,846	100.00	*120,800	100.00

The largest number of marriages in any one month, during 1901, occurred in the month of June. For thirty-eight years previous to 1892 the greatest number of marriages was in the month of November. Since then, with the exception of in 1895 and 1899, the greatest number of marriages has been in the month of June. The rule has been as follows: the largest proportion in the last quarter; the next largest in the second quarter; followed by the third quarter; and, finally, the first quarter having the smallest proportion of any. In 1893, 1894, 1896, 1900, and 1901 the largest proportion was in the second quarter.

During 1901 the proportions in the different quarters, from the largest to the smallest, were as follows: second quarter, 30.24 per cent.; fourth quarter, 26.81 per cent.; third quarter, 23.43 per cent.; first quarter, 19.52 per cent.

NATIVITY OF PERSONS MARRIED.

The following table shows the *number* of marriages, according to the nativities of the parties, for each of the last four years, and

* Including 20, date not given, recorded previous to 1860.

also for the aggregate of twenty-five years, from 1858 to 1882, inclusive; of five years, from 1883 to 1887, inclusive; of five years, from 1888 to 1892, inclusive; and for five years, from 1893 to 1897, inclusive:

TABLE XXXIII.

BIRTH-PLACE.	1901.	1900.	1899.	1898.	5 years, 1893 to 1897. Total.	5 years, 1888 to 1892. Total.	5 years, 1883 to 1887. Total.	25 years, 1858 to 1882. Total.
United States	1,769	1,800	1,658	1,522	7,846	7,813	7,157	33,553
Foreign countries	1,175	1,156	972	991	5,318	4,973	3,601	13,753
Native groom, foreign bride	457	499	411	402	1,785	1,637	1,323	3,488
Foreign groom, native bride	445	481	392	363	1,827	1,645	1,165	3,876
Not stated								64
Total	3,846	3,936	3,433	3,278	16,776	16,068	13,246	54,734

It will be understood that in the above enumerations the *parent nativity* of the persons married is not considered, but the country where born.

Parties born in the United States, although children of foreign born parents, are reckoned as natives.

In the following table are given the *percentages* by birth, of native, foreign, and mixed marriages, in each of the last four years, and in the aggregate of five years, 1893 to 1897, inclusive; of five years, 1888 to 1892, inclusive; of five years, 1883 to 1887, inclusive; and twenty-five years, 1858 to 1882, inclusive:

TABLE XXXIV.

BIRTH-PLACE.	1901.	1900.	1899.	1898.	5 years, 1893-1897.	5 years, 1888-1892.	5 years, 1883-1887.	25 years. 1858-1882.
United States	46.00	45.73	48.30	46.43	46.81	48.62	54.02	61.30
Foreign countries	30.55	29.37	28.31	30.23	31.65	30.95	27.19	25.13
Mixed nativity	23.45	24.90	23.39	23.34	21.54	20.43	18.79	13.57
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

It will be of some interest to notice that by the exhibit of the two preceding tables it is shown that, although the marriages of

the native born (whether the issue of foreign born parents or natives) have, as a rule, *increased in numbers*, they have also *steadily decreased in proportion*, with two or three exceptional years, that is, to the whole number of marriages; while the marriages of the class of the exclusively foreign born have been, for the past thirty years, gradually increasing in proportion.

Denominational.—The 3,846 marriages in 1901 were performed by clergymen of various denominations, or by civil authority, as follows :

DENOMINATIONAL.

Roman Catholic.....	1,738	Advent	12
Baptist.....	531	Advent Christian.....	10
Protestant Episcopal.....	443	Evangelical.....	9
Congregational.....	334	Independent	7
Methodist.....	232	Primitive Methodist.....	5
Free Baptist.....	121	Armenian.....	5
Universalist.....	86	New Jerusalem	3
Lutheran.....	56	Second Advent.....	2
Hebrew.....	56	Friends' Ceremony.....	2
Christian.....	52	Latter Day Saints.....	2
Presbyterian.....	40	Church of Emanuel.....	2
Justices of the Supreme Court....	32	Pentecostal.....	1
United Presbyterian.....	27	Denomination not stated .	6
Seventh Day Baptist.....	16		
Unitarian.....	16	Total.....	3,846

AGES OF THE MARRIED.

In the following table the varying ages of persons married during 1901 are presented :

TABLE XXXV.

AGES OF GROOMS.	AGES OF BRIDES.												Number of Grooms.
	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	
Under 20.....	51	28	2	...	1	...	...	...	...	...	...	...	82
20 to 25.....	387	814	135	17	2	...	...	1	...	...	...	...	1,356
25 to 30.....	132	575	429	55	17	2	1	...	...	...	...	...	1,211
30 to 35.....	29	157	209	114	27	10	1	...	...	...	...	...	547
35 to 40.....	8	51	79	71	47	18	3	1	...	...	...	...	278
40 to 45....	1	9	28	38	32	22	11	1	...	...	...	...	142
45 to 50.....	...	8	13	13	28	13	12	4	...	...	...	...	91
50 to 55.....	1	...	4	10	4	14	13	9	2	...	...	...	57
55 to 60.....	1	2	...	4	4	5	5	2	2	3	...	...	28
60 to 65.....	...	...	2	...	1	1	6	9	5	3	4	...	31
65 to 70.....	...	1	1	1	...	1	1	...	3	3	2	1	14
70 to 75.....	...	...	1	...	...	...	1	...	1	2	...	1	6
75 to 80.....	...	...	...	...	...	...	1	1	...	1	...	...	3
Number of Brides...	610	1,645	903	323	163	86	55	28	13	12	6	2	3,846

The extreme discrepancies in the ages of some couples married in 1901 were not so frequent as in some previous years.

The same results in 1901, in relation to numbers in the different age periods, may be presented in a different and perhaps clearer way as follows :

TABLE XXXVI.

1901.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.
Males	82	1,356	1,211	547	278	142	91	57	28	31	14	6	3
Females	610	1,645	903	323	163	86	55	28	13	12	6	2	....
Total persons	692	3,001	2,114	870	441	228	146	85	41	43	20	8	3

The whole number of persons in each division of ages, of both sexes, married in Rhode Island in each of the last thirty-six years, that is, from 1866 to 1901, inclusive, is presented in the following table :

TABLE XXXVII.

YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 to 85.	85 to 90.	Not stated.
1866.....	693	1,931	1,025	419	213	127	81	59	25	21	12	1	.....	.....	.....	23
1867.....	696	1,886	1,104	416	211	148	91	48	37	18	18	5	3	1	.....	9
1868.....	644	1,835	1,050	432	219	133	82	61	30	29	11	8	4	.....	.....	32
1869.....	642	1,814	1,051	468	227	134	79	46	35	15	11	2	3	2	.....	49
1870.....	744	1,883	1,084	415	216	159	86	64	26	24	12	3	2	.....	.....	6
1871.....	697	1,914	1,118	392	228	115	73	56	35	22	6	7	3	.....	.....	6
1872.....	786	2,073	1,182	434	237	131	81	61	43	21	13	6	1	.....	.....	5
1873.....	762	2,177	1,156	507	253	140	87	68	35	24	12	6	6	.....	.....	27
1874.....	770	1,992	1,179	459	268	159	101	52	36	39	8	9	1	.....	.....	9
1875.....	681	2,058	1,108	475	252	150	101	60	32	29	13	4	1	.....	.....	6
1876.....	691	1,741	1,041	450	224	154	80	53	27	19	12	1	2	.....	.....	9
1877.....	631	1,745	1,118	459	244	125	92	52	46	14	15	11	2	1	.....	9
1878.....	618	1,832	1,123	441	259	162	74	49	39	20	17	2	4	.....	.....	8
1879.....	639	1,879	1,156	481	272	123	78	56	39	26	18	9	2	2	1	11
1880.....	688	2,301	1,262	556	329	163	91	65	33	27	15	3	3	1	.....	1
1881.....	599	2,298	1,410	547	298	187	107	54	34	31	16	5	1	1	.....	2
1882.....	498	2,125	1,377	563	301	161	102	57	36	27	11	5	3	2	.....	.....
1883.....	497	2,108	1,370	486	319	183	115	73	31	20	14	3	2	1	.....	.....
1884.....	484	2,027	1,280	509	307	152	114	64	48	30	23	6	3	.....	.....	.....
1885.....	438	1,973	1,296	540	309	163	102	57	45	27	13	7	3	.....	1	2
1886.....	505	2,133	1,552	603	283	174	103	73	24	26	18	5	1	.....	.....	.....
1887.....	501	2,308	1,552	607	294	162	114	49	39	23	19	7	3	.....	.....	.....
1888.....	582	2,427	1,608	640	330	207	105	60	36	17	23	7	2	.....	.....	.....
1889.....	543	2,463	1,492	712	379	182	121	66	45	8	16	9	.....	2	.....	.....
1890.....	596	2,693	1,632	673	320	206	102	69	41	29	20	7	2	.....	.....	.....
1891.....	685	3,141	1,442	635	315	158	115	64	35	21	17	6	1	1	.....	4
1892.....	668	3,011	1,729	732	389	201	122	60	35	30	14	4	3	.....	.....	6
1893.....	676	2,777	1,869	776	436	237	133	79	47	39	9	8	.....	1	1	.....
1894.....	613	2,760	1,613	680	375	183	150	74	39	29	17	3	5	1	.....	.....
1895.....	607	2,763	1,887	767	417	227	142	83	49	22	12	13	4	1	.....	.....
1896.....	617	2,647	1,841	713	352	204	124	61	45	24	18	5	3	.....	.....	.....
1897.....	542	2,490	1,746	659	359	184	125	81	38	22	15	9	3	1	.....	.....
1898.....	579	2,639	1,795	675	394	187	127	82	38	20	10	7	3	.....	.....	.....
1899.....	587	2,720	1,871	810	361	201	149	59	54	31	11	8	3	1	.....	.....
1900.....	729	2,982	2,155	935	444	240	155	103	74	24	24	6	1	.....	.....	.....
1901.....	692	3,001	2,114	870	441	228	146	85	41	43	20	8	3	.....	.....	.....

In the following table will be found the number and proportion of the persons married under 20 years of age, both sexes, in nine periods of five years each, from 1856 to 1900, inclusive; for the whole period of forty-five years, and in 1898, 1899, 1900, and 1901

TABLE XXXVIII.

5-YEAR PERIODS.	Total number of persons married.	Persons married under 20.	Percentage under 20.
1856-1860.....	15,838	3,294	20.79
1861-1865.....	16,682	2,406	14.42
1866-1870.....	23,196	3,419	14.74
1871-1875.....	25,058	3,696	14.75
1876-1880.....	24,048	3,267	13.59
1881-1885.....	26,082	2,516	9.65
1886-1890.....	29,670	2,727	9.19
1891-1895.....	34,268	3,249	9.48
1896-1900.....	34,226	3,054	8.92
45 years, 1856-1900.....	229,068	27,628	12.06
1898.....	6,556	579	8.83
1899.....	6,866	587	8.69
1900.....	7,876	729	9.26
1901.....	7,692	692	9.00
Per cent., first fifteen years.....			16.37
Per cent., second fifteen years.....			12.60
Per cent., last four years.....			8.95

PROPORTION TO SEX.

Table exhibiting the percentages of GROOMS in each division of ages, in each of the last forty-two years :

TABLE XXXIX.

YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 40.	40 to 50.	50 and over.	Total.
1860.....	5.0	42.8	26.9	16.3	5.7	3.3	100.0
1861.....	4.6	44.5	25.4	15.5	5.8	4.2	100.0
1862.....	4.2	37.8	27.9	18.3	5.9	5.9	100.0
1863.....	3.5	38.0	29.6	17.2	5.8	5.9	100.0
1864.....	4.3	38.8	27.3	17.9	7.4	4.3	100.0
1865.....	3.5	37.0	28.4	18.9	7.5	4.7	100.0
1866.....	5.3	40.9	27.0	16.4	6.3	4.1	100.0
1867.....	4.3	40.1	27.9	16.8	6.8	4.1	100.0
1868.....	4.1	39.9	28.2	17.1	6.1	4.6	100.0
1869.....	4.3	39.6	27.7	18.5	6.1	3.8	100.0
1870.....	4.8	40.4	28.1	16.0	6.4	4.3	100.0
1871.....	5.3	40.1	28.9	16.5	4.9	4.3	100.0
1872.....	4.3	41.3	28.2	16.6	5.2	4.4	100.0
1873.....	3.8	42.4	26.7	17.0	6.0	4.1	100.0
1874.....	4.1	40.4	27.2	17.5	6.4	4.4	100.0
1875.....	3.5	40.9	27.8	17.6	6.1	4.2	100.0
1876.....	5.1	37.5	28.6	17.9	5.6	4.3	100.0
1877.....	4.3	36.0	30.2	18.7	5.9	6.9	100.0
1878.....	3.9	38.5	29.0	18.0	6.3	4.3	100.0
1879.....	3.9	37.8	28.8	19.3	5.4	4.8	100.0
1880.....	3.6	38.9	27.5	19.9	5.8	4.3	100.0
1881.....	2.8	37.2	29.7	19.5	6.8	4.0	100.0
1882.....	2.2	36.0	31.4	20.0	6.1	4.3	100.0
1883.....	2.9	36.2	31.7	17.7	7.2	4.3	100.0
1884.....	2.5	36.2	29.1	21.1	6.2	5.0	100.0
1885.....	2.6	34.7	30.2	20.9	6.8	4.8	100.0
1886.....	2.5	35.2	31.9	19.6	6.8	4.0	100.0
1887.....	1.7	37.1	31.6	19.6	6.2	3.8	100.0
1888.....	2.8	36.1	31.1	19.8	6.5	3.7	100.0
1889.....	2.3	37.6	27.8	21.3	6.6	4.4	100.0
1890.....	3.3	36.9	30.8	18.9	6.1	4.0	100.0
1891.....	3.2	44.7	26.4	17.2	5.2	3.3	100.0
1892.....	2.3	40.1	29.3	19.0	6.1	3.2	100.0
1893.....	2.9	35.3	30.7	21.0	6.3	3.8	100.0
1894.....	3.0	37.4	29.3	19.9	6.8	3.6	100.0
1895.....	2.2	36.0	30.6	21.0	6.3	3.9	100.0
1896.....	2.1	35.5	33.2	19.6	6.1	3.5	100.0
1897.....	2.3	35.5	32.6	19.3	6.3	4.0	100.0
1898.....	2.4	36.4	31.8	19.8	6.1	3.5	100.0
1899.....	2.3	35.0	30.9	21.6	6.6	3.6	100.0
1900.....	2.4	33.6	32.0	21.6	6.2	4.2	100.0
1901.....	2.1	35.3	31.4	21.5	6.1	3.6	100.0

GROOMS.

Table exhibiting the percentages of BRIDES in each division of ages, in each of the last forty-two years :

TABLE XL.

YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 40.	40 to 50.	50 and over.	Total.
1860.....	25.8	44.1	17.0	9.1	2.6	1.4	100.0
1861.....	29.6	42.0	15.2	7.8	4.1	1.3	100.0
1862.....	24.9	41.3	16.7	11.8	4.1	1.2	100.0
1863.....	24.9	42.6	16.9	9.8	4.1	1.7	100.0
1864.....	24.2	43.4	17.8	10.3	2.9	1.4	100.0
1865.....	22.6	43.3	19.1	11.0	3.5	1.5	100.0
1866.....	24.7	42.9	17.4	11.0	2.7	1.3	100.0
1867.....	25.4	40.5	19.3	10.0	3.4	1.4	100.0
1868.....	24.4	40.9	18.1	11.6	3.3	1.7	100.0
1869.....	24.1	40.5	18.7	12.1	3.4	1.2	100.0
1870.....	26.8	39.4	17.9	10.8	3.9	1.2	100.0
1871.....	24.6	41.9	19.1	10.1	3.1	1.2	100.0
1872.....	26.7	40.5	18.4	9.9	2.2	1.3	100.0
1873.....	25.3	40.8	17.5	12.0	2.7	1.7	100.0
1874.....	26.3	38.1	19.3	11.1	3.9	1.3	100.0
1875.....	23.9	42.1	16.8	11.8	4.0	1.4	100.0
1876.....	25.6	39.8	17.6	12.0	3.7	1.3	100.0
1877.....	23.4	40.4	18.8	12.1	3.6	1.7	100.0
1878.....	22.7	40.4	19.3	12.2	8.8	1.6	100.0
1879.....	22.8	40.7	19.4	12.1	3.0	2.0	100.0
1880.....	21.1	44.2	18.0	12.0	3.3	1.4	100.0
1881.....	19.0	43.0	21.5	11.2	3.8	1.5	100.0
1882.....	16.7	44.8	20.9	12.6	3.9	1.1	100.0
1883.....	16.2	44.2	20.6	13.2	4.3	1.5	100.0
1884.....	16.4	43.0	21.3	13.2	4.2	1.9	100.0
1885.....	14.9	44.6	21.8	13.2	3.8	1.7	100.0
1886.....	15.8	42.4	24.5	12.5	3.3	1.5	100.0
1887.....	15.9	44.1	22.8	12.1	3.5	1.6	100.0
1888.....	16.4	44.3	22.1	12.4	3.7	1.1	100.0
1889.....	15.1	43.7	21.5	14.7	3.4	1.6	100.0
1890.....	15.4	47.3	20.4	12.0	3.6	1.3	100.0
1891.....	17.4	49.9	17.0	11.4	3.1	1.2	100.0
1892.....	16.8	45.9	20.1	13.0	3.1	1.1	100.0
1893.....	16.2	43.0	22.0	13.3	4.1	1.4	100.0
1894.....	15.7	47.0	20.0	12.3	3.4	1.6	100.0
1895.....	15.2	43.0	23.4	12.8	4.3	1.3	100.0
1896.....	16.4	44.1	22.1	12.4	3.8	1.2	100.0
1897.....	14.9	43.9	23.1	13.2	3.5	1.4	100.0
1898.....	15.3	44.1	22.9	12.9	3.4	1.4	100.0
1899.....	14.8	44.3	23.6	12.5	3.6	1.2	100.0
1900.....	16.2	42.1	22.7	13.4	3.9	1.7	100.0
1901.....	15.8	42.8	23.5	12.6	3.7	1.6	100.0

It will be noticed in the preceding tables that the proportions of persons married of both sexes, under 20 years of age, largely decreased during the last decade.

Of grooms, the proportion, compared with the first decade, has decreased over 40 per cent., and of brides nearly 38 per cent.

The proportion of males married, between the ages of twenty and twenty-five, has decreased nearly 10 per cent., and has correspondingly increased in the more advanced age periods.

The proportion of females married, between twenty and twenty-five years of age, has not varied much, while of those between twenty-five and forty there has been an increase of proportion similar to that of males.

NUMBER OF TIMES MARRIED.

There will be found in the following table the number of grooms and of brides who were married for the first, second, third, etc., time in 1901 :

TABLE XLI.

	First Marriage.	Second Marriage.	Third Marriage.	Fourth Marriage.	Total.
Grooms.....	3,321	475	46	4	3,846
Brides	3,447	372	23	4	3,846

The proportion of *grooms* married for the first time, in 1901, was 86.3 per cent. of the whole number, and the proportion of *brides* married for the first time was 89.6 per cent.

The following table will show not only the number of times each of the parties was married, but also the number of bachelors and widowers who married spinsters, the number who married widows of first or second widowhood, etc., and of spinsters and widows who married bachelors, and widows of the second, third, or fourth marriage, etc. :

TABLE XLII.

GROOMS.	BRIDES.				Total Grooms.
	First.	Second.	Third.	Fourth.	
First Marriage.....	3,126	190	3	2	3,321
Second Marriage.....	296	166	13	.....	475
Third Marriage.....	23	15	7	1	46
Fourth Marriage.....	2	1	.....	1	4
Total Brides.....	3,447	372	23	4	3,846

It will be seen, by Table XLII, that 195 bachelors married widows, 3 of whom married brides that had been twice married, and 2 three times. Of the 525 widowers who married in 1901, 321 married spinsters, and 204 married widows. Of the widows who married widowers, 20 had been twice married, and 2 three times previously.

MARRIAGES OF PERSONS OF COLOR.

The number of marriages of persons of color in Rhode Island, in 1901, was 103. This includes six marriages in which one of the parties was white. The number and color of the individuals were, therefore, 200 persons of color and 6 persons white. Of the white persons 2 were males and 4 were females. The marriages, however, may be properly included in the above class, inasmuch as the offspring of such marriages are persons of color.

The number reported during 1901, from the different towns, was as follows, viz.:

East Greenwich.....	1
Warwick.....	3
Middletown.....	1
Newport City.....	11
East Providence.....	6
Providence City.....	75
Hopkinton.....	1
South Kingstown.....	4
Westerly.....	1
Total.....	103

There was also one marriage of a Malay with a white woman; and there were nine marriages of Chinese men and white women.

MARRIAGES OF THE DIVORCED.

The following table will give the towns from which returns of marriage with the facts of divorce were reported during 1901, the whole number of marriages of divorced persons, whether of one or both parties ; also whether the second or third marriage of the divorced groom or bride :

TABLE XLIII.

TOWNS.	Number of Marriages.	Number of Divorced Persons Married.	Grooms.	Brides.	Second Marriage of Groom.	Third Marriage of Groom.	Second Marriage of Bride.	Third Marriage of Bride.
PROVIDENCE CITY.....	101	113	46	67	42	4	66	1
Barrington	1	1	.....	1	.....	.....	1	.....
Bristol	2	2	2	.....	2	.....	.....	.....
Coventry	2	2	.....	2	.....	.....	2	.....
East Greenwich	3	4	2	2	2	.....	2	.....
West Greenwich	1	1	.....	1	.....	.....	1	.....
Warwick	10	11	4	7	4	.....	7	.....
NEWPORT CITY.....	6	7	3	4	3	.....	4	.....
New Shoreham	2	2	.....	2	.....	.....	2	.....
Tiverton.....	2	3	1	2	1	.....	2	.....
Burrillville	2	3	1	2	1	.....	2	.....
CENTRAL FALLS.....	3	3	2	1	2	.....	1	.....
Cranston.....	4	4	1	3	1	.....	3	.....
Cumberland	3	4	2	2	2	.....	2	.....
East Providence.....	5	6	4	2	4	.....	1	1
Foster	1	1	1	.....	1	.....	.....	.....
Glocester.....	1	1	.....	1	.....	.....	1	.....
PAWTUCKET.....	18	22	7	15	7	.....	15	.....
Scituate	3	3	1	2	1	.....	2	.....
WOONSOCKET	8	8	4	4	4	.....	4	.....
Exeter.....	1	1	.....	1	.....	.....	1	.....
Hopkinton.....	2	3	2	1	2	.....	1	.....
Narragansett.....	1	1	.....	1	.....	.....	1	.....
North Kingstown	1	1	.....	1	.....	.....	.....	1
South Kingstown.....	1	1	1	.....	1	.....	.....	.....
Richmond	1	1	.....	1	.....	.....	1	.....
Westerly.....	8	8	4	4	4	.....	4	.....
Total	193	217	88	129	84	4	126	3

There were 193 marriages, in 1901, in which one or both of the parties had been divorced.

The proportion of the *number of marriages* of which one or both of the parties had been divorced, to the whole number of marriages, was about 5 per cent., or one in every 20.

But the proportion of divorced *persons* married during 1901, to the whole number of persons married in the same year, was about one in every 35, or 2.8 per cent., or 28 in every 1,000.

The number of divorced persons married, in 1901, was twenty-eight less than in the previous year.

These 193 marriages of divorced persons were performed by clergymen of the different denominations, or by civil authority, as follows :

Baptist.....	56	Advent Christian.....	2
Congregational.....	36	United Presbyterian.....	2
Methodist.....	30	Lutheran.....	1
Free Baptist.....	16	Advent.....	1
Universallst.....	13	Primitive Methodist.....	1
Christian.....	7	Hebrew.....	1
Roman Catholic.....	5	Latter Day Saints.....	1
Protestant Episcopal.....	5	Second Advent.....	1
Unitarian.....	3	New Jerusalem.....	1
Evangelical.....	3	Justices of Supreme Court.....	8

Marriage and Education.—Of the number of persons married, in 1901, 563 signed their marriage certificates with a mark. The following will show the number of males and females who did so, and their nativity :

	Whole Number.	Native.	Foreign.
Males.....	243.....	47.....	196
Females.....	319.....	50.....	269
Total.....	562.....	97.....	465

DIVORCES, 1901.

According to the returns made to the Secretary of the State Board of Health (State Registrar) by the clerks of the Supreme Courts of the different counties of Rhode Island, the number of applications for divorce, during 1901, was seven hundred and fifty-one (751).

The number of divorces granted, during 1901, was five hundred and seventeen.

There were 37 more applications, during 1901, than during the preceding year, and the number of divorces granted was 51 more.

Divorces are decreed for the following seven statute causes, viz.:

1. Adultery.
2. Extreme cruelty.
3. Willful desertion for five years of either of the parties, or for a shorter period, in the discretion of the court.
4. Continued drunkenness.
5. Neglect or refusal to provide necessities (having ability) for the subsistence of a wife.
6. Gross misbehavior and wickedness other than aforesaid.
7. Impotency.

Divorces are also decreed, or marriages set aside, in the discretion of the court, for ascertained affinity, consanguinity, idiocy, insanity, penitentiary crimes, and bigamous or otherwise illegal marriage.

The following table shows the number of applications for divorce, and the number granted, in 1901, in each county of the State; also the causes alleged for the applications:

TABLE LXIV.

COUNTIES.	Number of Applications.	Number Granted.	CAUSES ALLEGED.									Total Causes Alleged.
			Adultery.	Extreme Cruelty.	Willful Desertion.	Continued Drunkenness.	Neglect to Provide Necessaries, etc.	Other Gross Misbehavior.	Void Marriage.	Habitual use of Morphine.	Lived separate and apart for over 10 yrs.	
Bristol.....	24	8	3	5	17	6	14	5	1	1	....	52
Kent.....	31	19	8	14	7	8	20	2	....	....	....	59
Newport.....	33	16	7	9	18	9	17	12	....	....	....	72
Providence.....	636	456	79	217	262	162	422	96	3	....	12	1,353
Washington.....	27	18	6	10	14	3	12	7	....	....	....	52
Whole State.....	751	517	103	255	318	188	485	122	4	1	12	1,488

There were, during the year 1901, seven hundred and fifty-one (751) applications for divorce, and the whole number of causes alleged was fourteen hundred and eighty-eight (1,488). There was, therefore, an average of nearly two causes alleged in each application.

The causes alleged why divorces should be granted in the applications, during 1901, were 118 more in number than in 1900.

COUNTIES.	SEX.	CAUSES OF APPLICATIONS WHERE DIVORCE WAS GRANTED.							APPLICANT.			
		Adultery.	Extreme Cruelty.	Willful Desertion.	Continued Drunkenness.	Neglect to Provide Necessaries, etc.	Other Gross Misbehavior.	Void Marriage.	Separate and lived apart for more than 10 years.	Husband.	Wife.	Total.
Bristol County	{ Males.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....
	{ Females...	.....	.....	1	1	5	.....	.....	.....	.....	7	8
Kent County	{ Males.....	1	.....	2	2	.....	.....	.....	.....	5	.....	.....
	{ Females...	2	3	4	4	7	.....	.....	.....	.....	20	25
Newport County.....	{ Males.....	1	.....	4	1	.....	1	.....	.....	7	.....	.....
	{ Females...	4	4	8	3	10	5	.....	.....	.....	34	41
Providence County.....	{ Males.....	25	9	61	17	.....	4	.....	4	120	.....	.....
	{ Females...	13	58	51	34	230	4	1	.....	.....	391	511
Washington County.....	{ Males.....	3	.....	3	.....	.....	1	.....	.....	7	.....	.....
	{ Females...	1	6	7	3	10	4	.....	.....	.....	31	38
Total.....	{ Males.....	30	9	71	20	.....	6	.....	4	140	.....	.....
	{ Females...	20	71	71	45	262	13	1	.....	.....	483	623

LENGTH OF TIME MARRIED.		Bristol County.	Kent County.	Newport County.	Providence County.	Washington County.	Whole State.
Number under six months. ....	.....	1	.....	.....	8	.....	9
Six months and under one year.....	.....	.....	1	.....	12	.....	13
One year and under five .....	.....	7	6	5	172	10	200
Five years and under ten .....	.....	9	11	12	173	6	211
Ten years and over .....	.....	7	13	16	256	11	303
Unstated.....	.....	.....	.....	.....	15	.....	15

Average of years of marriage in Bristol County.....	.....	9 years, 3 months.
" " " Kent County.....	.....	11 years, 1 month.
" " " Newport County.....	.....	12 years, 3 months.
" " " Providence County.....	.....	9 years, 11 months.
" " " Washington County .....	.....	9 years.
" " " Whole State .....	.....	10 years, 6 months

In order to show the actual number of applications, and the number of divorces granted in each of the last twenty-nine years, the following summary is presented:

	Applications for divorce.	Divorces granted.	Applications refused or continued or withdrawn.
1873.....	261.....	173.....	88
1874.....	276.....	242.....	34
1875.....	227.....	158.....	69
1876.....	254.....	196.....	58
1877.....	257.....	178.....	79
1878.....	258.....	196.....	62
1879.....	255.....	246.....	9
1880.....	347.....	273.....	74
1881.....	350.....	268.....	82
1882.....	339.....	271.....	68
1883.....	321.....	257.....	64
1884.....	320.....	266.....	54
1885.....	293.....	227.....	66
1886.....	336.....	257.....	79
1887.....	322.....	248.....	74
1888.....	304.....	224.....	80
1889.....	366.....	274.....	92
1890.....	327.....	244.....	83
1891.....	362.....	275.....	87
1892.....	412.....	296.....	116
1893.....	529.....	301.....	228
1894.....	506.....	280.....	226
1895.....	516.....	373.....	143
1896.....	526.....	363.....	163
1897.....	544.....	372.....	172
1898.....	615.....	400.....	215
1899.....	648.....	412.....	236
1900.....	714.....	466.....	248
1901.....	751.....	517.....	234
<hr/>			
29 years, total.....	11,536.....	8,253.....	3,283

The average annual proportion of decrees of divorce granted during the last twenty-nine years, to the applications therefor, was 71.5 per cent.

During the last ten years the proportions were as follows:

Years.....	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
Per cent	71.8.....	56.9.....	55.3.....	72.3.....	69.0.....	68.4.....	65.0.....	63.6.....	65.3.....	68.8

The proportion of *divorces granted*, in 1901, to the whole number of marriages, during the same year, was *one divorce* to every seven and four-tenths marriages.

The proportion of *applications for divorce* to whole number of marriages, during the year, was one *application* to every five and one-tenth marriages.

The following table shows the number of divorces granted in each county, and the whole State, in each of the last thirty-three years, and the proportion of marriages to each divorce granted in each year :

TABLE XLV.

YEARS.	Bristol County.		Kent County.		Newport County.		Providence County.		Washington County.		Whole State.	
	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.
1869.....	10	10.6	15	12.5	6	27.7	120	13.8	11	15.5	162	14.1
1870.....	3	22.7	18	11.8	6	26.3	152	11.3	21	9.3	200	11.8
1871.....	5	16.8	11	17.9	4	49.7	123	13.3	18	11.4	161	14.5
1872.....	8	10.2	13	15.7	8	22.9	149	12.6	22	8.9	260	12.7
1873.....	6	16.2	22	9.8	8	21.9	131	14.8	6	33.7	173	15.2
1874.....	10	8.9	20	8.0	6	29.0	190	10.0	16	11.6	242	10.5
1875.....	2	50.0	18	8.8	7	23.4	120	14.9	11	20.5	158	15.7
1876.....	6	14.5	15	12.8	7	20.5	148	11.1	20	8.8	190	11.5
1877.....	7	12.0	9	16.3	7	26.0	134	12.4	21	9.9	178	12.8
1878.....	4	26.0	11	13.3	13	12.8	156	10.9	12	17.3	196	11.9
1879.....	5	18.8	19	9.0	7	24.1	195	9.1	20	9.7	246	9.7
1880.....	8	12.1	23	9.4	11	17.6	208	9.7	23	17.0	273	10.1
1881.....	6	20.1	26	7.3	10	16.9	207	10.0	19	11.0	268	10.4
1882.....	6	15.0	18	10.3	15	13.0	221	8.9	11	16.2	271	9.7
1883.....	6	15.8	15	11.5	9	21.2	214	9.2	13	13.3	257	10.2
1884.....	4	16.7	20	8.0	12	15.7	209	9.3	21	8.2	266	9.6
1885.....	3	23.0	9	18.6	17	11.2	186	10.1	12	15.0	227	11.0
1886.....	5	16.0	17	11.0	15	12.3	194	10.9	26	7.3	257	10.7
1887.....	1	75.0	23	8.0	13	13.4	187	11.8	24	7.9	248	11.4
1888.....	5	15.8	14	13.5	4	46.0	188	12.5	13	16.5	224	13.5
1889.....	6	12.5	27	8.3	14	14.0	211	11.2	16	10.8	274	11.1
1890.....	4	27.5	19	12.1	1	232.0	196	12.3	24	8.8	244	13.0
1891.....	10	8.4	20	11.2	17	12.6	214	11.2	14	14.3	275	12.1
1892.....	2	49.5	19	12.4	20	11.6	236	11.6	19	10.4	296	11.8
1893.....	3	38.0	10	23.8	21	9.9	235	11.5	22	8.0	301	11.8
1894.....	7	16.0	22	9.0	18	12.3	207	12.4	26	6.8	280	11.7
1895.....	8	10.9	17	9.9	11	21.3	318	8.8	19	11.2	373	9.4
1896.....	7	12.4	21	7.5	18	11.3	304	8.8	13	16.1	363	9.2
1897.....	9	9.3	20	8.5	16	12.9	306	8.1	21	9.7	372	8.4
1898.....	7	12.4	22	9.3	19	9.9	333	7.8	19	9.8	400	8.2
1899.....	6	13.5	20	11.9	18	12.0	355	7.7	13	13.0	412	8.3
1900.....	3	10.6	19	12.4	15	17.1	400	7.9	24	8.8	466	8.5
1901.....	8	11.6	19	13.5	16	13.3	456	6.8	18	10.4	517	17.4

The ratio of divorces granted in the entire State, during 1901, to the whole number of marriages during the same year, was one divorce to every seven and four-tenths marriages, as previously stated.

During the ten years 1869 to 1878, inclusive, the ratio of divorce to number of marriages was one divorce to every thirteen; during the ten years 1879 to 1888, inclusive, the ratio was one divorce to every ten and six-tenths marriages.

The average of the last ten years was one divorce to every nine and five-tenths marriages.

During the thirty-three years 1869-1901 the average proportions of divorce to marriage, in the several counties and the State, have been as follows :

Bristol County.....	One divorce to every 19.7 marriages.
Kent County.....	One divorce to every 11.6 marriages.
Newport County	One divorce to every 25.5 marriages.
Providence County	One divorce to every 10.7 marriages.
Washington County.....	One divorce to every 12.3 marriages.
Whole State.....	One divorce to every 11.1 marriages.

Table showing the Number of Marriages to every Decree of Divorce, in five of the New England States, during the twenty-five years from 1877 to 1901, inclusive.

TABLE XLVI.

STATES.	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
Rhode Island.....	12.8	11.9	9.7	10.1	10.4	9.7	10.2	9.6	11.0	10.7	11.4	13.5	11.1	13.0	12.1	11.8	11.8	11.7	9.4	9.2	8.4	8.2	8.3	8.5	7.4
Maine.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10.4	9.2	8.3	8.4	8.3	7.4	6.7	6.7	6.8	.....
New Hampshire.....	.....	.....	.....	7.7	9.2	10.9	12.8	10.4	10.9	8.3	10.7	8.7	9.8	9.5	9.5	11.7	10.3	12.6	9.9	9.9	8.8	8.5	8.6	9.3	8.3
Vermont.....	15.0	14.0	21.0	20.0	16.0	17.8	16.4	13.5	28.8	20.0	13.5	16.9	19.6	18.3	17.1	17.4	15.9	12.3	9.7	11.2	11.9	13.0	12.3	13.2	13.5
Massachusetts.	23.1	21.4	23.4	26.8	40.9	34.3	27.8	28.2	26.4	30.0	24.5	30.6	26.9	31.8	27.1	28.5	21.8	18.6	24.2	14.7	20.5	18.7	20.2	19.3	18.1
Connecticut.	10.1	10.7	13.4	13.9	11.6	12.8	12.1	14.9	13.3	14.2	14.9	13.8	10.7	13.2	13.7	13.2	16.6	15.9	15.9	14.5	16.0	15.3	15.9	15.5	13.9

DEATHS, 1901.

The number of deaths registered in Rhode Island during 1901, according to the returns made to the State Registrar, was seven thousand, nine hundred and sixty-six (7,966).

This number is larger by 508 than that of the year 1899, and smaller by 857 than that of 1900.

The death rate (18.2 in every 1,000 living persons) was 2.4 lower than that of the previous year.

The following summary will show the death rates per 1,000 for each of the last five census years, in comparison with the last five years:

1880.	1885.	1890.	1895.	1900.	1897.	1898.	1899.	1900.	1901.
17.5.....	17.7.....	20.7.....	19.6.....	20.6.....	17.6.....	16.7.....	17.6.....	20.6.....	18.2

Since 1876 the returns have been more complete than previously, and during the last ten years few deaths have occurred in the State which were not reported.

On the following page will be found the death rates, by counties, for forty-one years.

TABLE XLVII.

Death rates per 1,000 living, by counties, for forty-one years, from 1861 to 1901, inclusive; also the average rate of each period of five years each, from 1861 to 1901, inclusive, for the whole State.

YEARS.	Bristol.	Kent.	Newport.	Providence.	Washington.	State.	STATE. ANNUAL AVERAGE OF FIVE-YEAR PERIODS, 1861-1901.
Five years, 1861-1865	17.7	15.9	18.9	17.7	12.4	17.117.1 per 1,000 living.
1866	19.2	14.2	17.3	16.6	11.4	16.115.6 per 1,000 living.
1867	17.0	15.1	15.0	16.4	10.9	15.6	
1868	15.7	13.7	14.7	17.0	10.0	15.7	
1869	17.9	16.7	13.2	16.0	12.8	15.6	
1870	15.5	13.5	14.1	15.5	12.0	14.9	
1871	16.3	17.5	12.2	15.9	12.3	15.417.5 per 1,000 living.
1872	21.1	16.1	14.5	21.2	14.7	19.1	
1873	18.4	13.8	19.0	22.0	15.1	20.2	
1874	14.7	13.2	10.8	17.7	13.7	16.3	
1875	14.9	14.9	13.5	17.5	15.5	16.7	
1876	14.7	11.7	13.5	16.8	15.9	15.916.8 per 1,000 living.
1877	18.2	13.1	12.4	18.7	12.8	17.2	
1878	17.5	14.2	13.7	18.3	13.0	17.2	
1879	13.2	15.1	14.8	17.2	11.1	16.2	
1880	19.2	14.9	14.5	18.5	12.7	17.5	
1881	17.9	16.5	15.7	19.3	11.9	18.118.0 per 1,000 living.
1882	16.5	15.3	17.2	19.7	11.0	18.4	
1883	17.7	14.6	17.7	20.8	9.8	19.1	
1884	17.7	17.1	14.5	17.8	12.6	16.9	
1885	16.3	16.4	14.5	18.5	14.0	17.7	
1886	19.2	17.5	15.0	19.2	15.0	18.819.8 per 1,000 living.
1887	18.2	15.5	15.1	21.1	15.5	19.8	
1888	21.3	18.4	18.0	21.0	16.0	20.4	
1889	17.6	20.1	14.7	19.2	14.6	19.0	
1890	22.1	17.6	16.5	22.1	13.5	20.7	
1891	20.5	18.0	20.6	18.6	12.6	19.619.6 per 1,000 living.
1892	20.0	20.7	20.1	20.2	15.2	20.1	
1893	19.9	19.4	17.9	19.9	12.6	19.6	
1894	16.5	19.8	16.9	19.1	16.4	19.1	
1895	20.9	17.4	15.9	20.1	15.0	19.6	
1896	17.9	18.8	17.0	19.2	15.3	19.118.3 per 1,000 living.
1897	18.6	16.7	16.2	17.6	14.7	17.6	
1898	15.0	15.6	15.5	16.7	14.5	16.7	
1899	17.6	16.8	17.6	17.6	14.1	17.6	
1900	22.6	23.6	18.7	19.9	18.2	20.6	
1901	17.9	19.7	16.5	17.8	16.2	18.2	

Annual average, forty years, 1861-1900.....17.8 per 1,000 living.

SEX OF DECEDENTS.

Of the 7,966 persons whose deaths were returned during the year 1901, 4,066 were males and 3,900 were females; the ratio standing at 104.2 males to each 100 females, or about 510 males and 490 females in every 1,000 decedents.

The following Table will show the number and proportion of males and females among the *decedents* in Rhode Island during the ten years 1853 to 1862, inclusive; also in each of the thirty-nine years from 1863 to 1901, inclusive, and for the entire period of forty-nine years:

TABLE XLVIII.—DEATHS.

	Males.	Females.	Males to every 100 females.
10 years, 1853-1862.....	10,930.....	11,369.....	96.9
1863.....	1,621.....	1,586.....	102.2
1864.....	1,633.....	1,727.....	92.4
1865.....	1,686.....	1,719.....	98.1
1866.....	1,497.....	1,473.....	101.5
1867.....	1,442.....	1,447.....	99.7
1868.....	1,413.....	1,499.....	94.3
1869.....	1,696.....	1,686.....	100.6
1870.....	1,588.....	1,650.....	96.2
1871.....	1,621.....	1,723.....	94.1
1872.....	2,118.....	2,129.....	99.4
1873.....	2,166.....	2,237.....	95.5
1874.....	2,111.....	2,118.....	99.7
1875.....	2,108.....	2,209.....	95.4
1876.....	1,969.....	2,147.....	91.7
1877.....	2,132.....	2,318.....	92.0
1878.....	2,161.....	2,280.....	94.8
1879.....	2,183.....	2,289.....	95.4
1880.....	2,366.....	2,463.....	96.0
1881.....	2,467.....	2,549.....	96.8
1882.....	2,487.....	2,587.....	96.5
1883.....	2,627.....	2,655.....	99.0
1884.....	2,486.....	2,655.....	93.6
1885.....	2,607.....	2,782.....	93.7
1886.....	2,833.....	3,016.....	93.9
1887.....	3,177.....	3,163.....	100.4
1888.....	3,199.....	3,395.....	95.4
1889.....	3,093.....	3,166.....	97.7
1890.....	3,501.....	3,433.....	102.0
1891.....	3,341.....	3,279.....	101.9
1892.....	3,725.....	3,671.....	101.5
1893.....	3,789.....	3,651.....	103.8
1894.....	3,559.....	3,601.....	98.8
1895.....	3,799.....	3,736.....	101.6
1896.....	3,874.....	3,680.....	106.7
1897.....	3,587.....	3,523.....	106.7
1898.....	3,554.....	3,351.....	106.1
1899.....	3,725.....	3,733.....	99.8
1900.....	4,473.....	4,350.....	102.8
1901.....	4,066.....	3,900.....	104.2
49 years.....	114,410.....	115,795.....	98.7

The following Table of *births*, during the same period of time as the preceding, will show by comparison the different proportions of the sexes in the two classes of events :

TABLE XLIX.—BIRTHS.

	Males.	Females.	Males to every 100 females.
10 years, 1853-1862.....	18,377.....	17,260.....	106.4
1863.....	1,892.....	1,788.....	105.8
1864.....	1,949.....	1,942.....	100.3
1865.....	2,096.....	1,857.....	112.9
1866.....	2,546.....	2,256.....	108.0
1867.....	2,655.....	2,464.....	107.0
1868.....	2,745.....	2,637.....	104.5
1869.....	2,685.....	2,560.....	104.9
1870.....	2,679.....	2,536.....	104.9
1871.....	2,878.....	2,800.....	105.8
1872.....	3,085.....	3,058.....	100.9
1873.....	3,135.....	2,887.....	108.6
1874.....	3,311.....	3,155.....	104.9
1875.....	3,362.....	3,146.....	106.9
1876.....	3,291.....	3,038.....	108.3
1877.....	3,163.....	2,072.....	103.0
1878.....	3,402.....	3,312.....	102.7
1879.....	3,259.....	3,091.....	105.4
1880.....	3,241.....	3,054.....	106.1
1881.....	3,498.....	3,263.....	107.2
1882.....	3,509.....	3,316.....	105.8
1883.....	3,548.....	3,498.....	101.4
1884.....	3,713.....	3,592.....	103.4
1885.....	3,591.....	3,437.....	104.4
1886.....	3,897.....	3,724.....	104.6
1887.....	3,968.....	3,700.....	107.4
1888.....	4,023.....	3,817.....	105.4
1889.....	4,193.....	4,027.....	104.1
1890.....	4,351.....	4,199.....	103.2
1891.....	4,926.....	4,500.....	109.5
1892.....	4,765.....	4,505.....	109.3
1893.....	5,105.....	4,943.....	103.3
1894.....	5,129.....	4,856.....	105.6
1895.....	5,136.....	4,746.....	108.2
1896.....	5,461.....	5,289.....	103.3
1897.....	5,493.....	5,302.....	103.5
1898.....	5,443.....	5,287.....	102.9
1899.....	5,591.....	5,240.....	106.7
1900.....	5,625.....	5,459.....	103.0
1901.....	5,944.....	5,348.....	111.1
49 years.....	166,660.....	158,051.....	105.6

SEASON AND MORTALITY.

The whole number of decedents, and the sex of the same, in each month of the year 1901, and in each division of the State, may be found in Table V, on the tenth and eleventh pages.

The influence of season upon mortality may be further illustrated by the following Table, which shows the number and percentage of deaths, compared with the whole number of deaths, in each quarter of each of the last five years, and in the aggregate for forty-five years, 1853 to 1897, inclusive :

TABLE L.

SEASON.	1901.		1900.		1899.		1898.		1897.		45 years, 1853-1897.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
January-March..	2,179	27.35	2,400	27.20	2,043	27.39	1,627	23.56	1,937	27.24	47,004	24.38
April-June	1,761	22.11	2,220	25.16	1,699	22.78	1,643	23.79	1,540	21.66	42,029	21.80
July-September.	2,162	27.14	2,315	26.24	2,053	27.53	1,998	28.94	2,024	28.47	55,526	28.80
October-Dec.....	1,864	23.40	1,888	21.40	1,663	22.30	1,637	23.71	1,099	22.63	48,235	25.02
Total	7,966	100.00	8,823	100.00	7,458	100.00	6,905	100.00	7,110	100.00	192,794	100.00

Comparing the percentages of 1901 with those of the forty-five years, we find that of the first quarter is 2.97 per cent. larger ; the second quarter is .31 per cent. larger ; the third quarter 1.66 per cent. smaller ; and the last quarter 1.62 per cent. smaller than for the average of the forty-five years. The greatest mortality for any one season of any year is usually found in the third quarter ; but in 1890 and 1900, owing in large measures to the epidemic of influenza, the first quarter had the largest mortality.

TABLE LI.

Showing the Months in the Order of Largest Mortality for Eight Years.

	1901.	1900.	1899.	1898.	1897.	1896.	1895.	1894.
1. March.....	761	April..... 988	January..... 785	August..... 720	August..... 735	July..... 836	March..... 779	July..... 833
2. January.....	742	March..... 915	August..... 752	September.... 673	February..... 721	August..... 810	July..... 743	January..... 799
3. August.....	735	August..... 829	July..... 717	July..... 595	September.... 647	March..... 635	August..... 738	August..... 628
4. July.....	732	July..... 823	March..... 638	December.... 585	July..... 642	April..... 634	April..... 630	September.... 595
5. September....	695	February..... 752	December.... 636	March..... 582	March..... 619	May..... 626	October..... 629	April..... 578
6. February.....	676	January..... 733	April..... 634	April..... 576	January..... 557	January..... 617	September.... 610	May..... 569
7. October.....	648	December.... 678	February..... 620	May..... 568	October..... 572	June..... 596	December.... 610	March..... 561
8. April.....	638	September.... 663	September.... 584	October..... 543	December.... 559	February..... 581	February..... 606	February..... 559
9. December....	635	May..... 645	May..... 547	January..... 540	April..... 538	September.... 566	January..... 577	June..... 549
10. May.....	596	October..... 629	November.... 522	November.... 509	May..... 520	December.... 561	November.... 570	October..... 520
11. November....	581	June..... 587	June..... 518	February..... 505	June..... 482	October..... 556	May..... 562	December.... 502
12. June.....	527	November.... 581	October..... 505	June..... 499	November.... 478	November.... 486	June..... 481	November.... 467
	7,966	8,823	7,458	6,905	7,110	7,504	7,535	7,160

NATIVITY OF DECEDENTS.

There may be found in Table I, on pages 2-5, the number of decedents in 1901, by division of the two classes of native and foreign born.

Of the whole number of decedents, 7,966, 5,654 were native born, that is, were born in the United States, and 2,312 were born outside of the United States.

PARENTAGE OF DECEDENTS.

Of the whole number of decedents, 7,966, reported in 1901, 3,264 were of native, and 4,702 were of foreign and unknown parentage.

By the term "*foreign parentage*" is meant the decedents whose *fathers* were born in some other country and not in the United States. The grandchildren of the foreign born are reckoned as of native parentage, if their fathers were born in the United States.

The following twelve towns reported a larger number of decedents of foreign *parentage* than of native, namely: Warren, Warwick, Tiverton, Burrillville, Central Falls, Cumberland, Johnston, Lincoln, North Smithfield, Pawtucket, Providence, and Woonsocket; also the State Institutions at Cranston.

These numbers varied from a moderate excess to three or four times as many of foreign as of native *parentage*.

The following Table gives the number and proportion in every one thousand deaths of decedents of native and of foreign *parentage* in each of the last five years; and in the aggregate for forty years, or from 1858 to 1897, inclusive:

TABLE LII.

PARENTAGE.	1901.		1900.		1899.		1898.		1897.		40 years, 1858-1897.	
	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.
Native.....	3,264	409.7	3,745	424.5	3,097	415.0	2,938	425.5	3,102	436.8	103,927	503.5
Foreign.....	4,702	590.3	5,078	575.5	4,361	585.0	3,967	574.5	4,008	563.7	102,579	496.7
Total.....	7,966	1000.0	8,823	1000.0	7,458	1000.0	6,905	1000.0	7,110	1000.0	206,506	1000.0

AGE OF DECEDENTS.

In Table I, on pages 2-5, may be found the aggregate and average age of all the decedents whose deaths occurred in 1901, and with the age of each sex in each town and county in the State.

By that Table it will be seen that the average age of all the male decedents in the State, in 1901, was 35.01 years, and that the average age of all the female decedents, in the same year, was 38.07 years; the average age of all decedents, of both sexes, was 36.51 years.

The average age of the total decedents in the State, in 1901, was nearly three years greater than the average for 1900.

The average age of the male decedents, in 1901, was three and twenty one-hundredths of a year greater, and the average age of the female decedents was two and forty-nine one-hundredths of a year, greater than in the previous year.

The following Table will present, separately, the average age of the male and female decedents, and the average age of all decedents, in each year for forty-one years; also the average age in seven periods of five years each, from 1861 to 1900, inclusive:

TABLE LIII.

YEARS.	Average Age of Males.	Average Age of Females.	Average Age of All.	Average Age, 5-year periods, 1861-1900.
1861	26.95	30.58	28.8229.32
1862	29.64	32.65	31.15	
1863	28.29	30.86	29.56	
1864	28.13	30.43	29.40	
1865	26.38	28.97	27.69	
1866	31.13	35.07	33.0932.42
1867	32.16	35.86	34.01	
1868	30.47	35.08	32.85	
1869	28.62	31.29	30.25	
1870	31.02	32.75	31.90	
1871	32.57	34.43	33.5230.16
1872	28.41	31.15	29.77	
1873	26.18	28.62	27.42	
1874	28.03	31.66	28.86	
1875	29.72	32.75	31.27	
1876	31.47	33.21	32.3731.21
1877	29.25	31.56	30.45	
1878	29.02	31.11	30.09	
1879	31.29	33.24	32.29	
1880	29.62	32.06	30.86	
1881	30.99	34.07	32.5533.90
1882	31.33	35.57	33.50	
1883	33.64	37.44	35.55	
1884	32.29	35.12	33.76	
1885	33.53	35.60	34.59	
1886	33.02	34.91	34.0133.42
1887	30.97	32.91	31.95	
1888	33.17	35.74	34.53	
1889	32.20	35.74	34.00	
1890	31.04	34.26	32.62	
1891	32.70	36.28	34.4733.96
1892	32.96	37.75	35.34	
1893	30.97	33.99	32.46	
1894	32.47	34.40	33.44	
1895	31.70	36.49	34.08	
1896	30.86	34.47	32.6134.53
1897	33.71	37.06	35.37	
1898	34.34	36.34	35.31	
1899	34.04	37.30	35.67	
1900	31.81	35.58	33.67	
1901	35.01	38.07	36.51	

The above Table shows that the average longevity of the decedents in Rhode Island increased over five years during a period of forty years, ending with 1900.

The following Table will present some of the facts of the preceding as occurring in the different divisions of the State, as well as of the State at large. It will show the average age of the decedents in each of the larger divisions of the State, in each of the last four years, and also the average of each of seven periods of five years each, comprising the thirty-five years from 1863 to 1897, inclusive :

TABLE LIV.

DIVISIONS OF THE STATE.	1901.	1900.	1899.	1898.	1893-1897, 5 years.	1888-1892, 5 years.	1883-1887, 5 years.	1878-1882, 5 years.	1873-1877, 5 years.	1868-1872, 5 years.	1863-1867, 5 years.
Bristol County	45.36	36.06	36.89	40.09	42.78	39.76	38.45	36.68	33.61	35.12	34.78
Kent County	35.49	29.81	33.14	32.74	31.07	32.22	37.66	37.11	36.20	34.77	35.81
Newport County.....	39.31	39.06	42.84	39.57	39.98	40.63	42.41	39.21	40.68	40.04	33.54
Providence County*	33.24	32.48	34.70	32.18	30.79	31.63	31.83	30.60	28.46	25.26	29.16
Providence City.....	35.47	33.01	33.79	33.18	32.03	33.44	32.19	29.50	27.19	25.45	28.50
Washington County.....	49.92	44.41	50.87	50.25	46.55	46.77	43.39	41.01	41.14	39.67	30.87
Whole State.	36.51	33.67	35.67	35.31	33.59	34.19	33.97	31.86	30.28	31.66	30.73

By reference to Table LIV it will be seen that the average age of all decedents during the last four years is more than four years greater than the first period of five years, 1863-1867.

PERCENTAGE OF DECEDENTS BY DIFFERENT AGES.

In Table VI, on pages 12 to 19, inclusive, will be found the number of deaths in 1901, in each town and each county, of each sex, and in each period of life, with the percentage of the whole number of deaths in each division to the population of the same, geometrically estimated from the census of 1900.

The following Table shows the percentage of decedents in each division of ages, to whole number of deaths, in each of the last nine years, and in the aggregate for three periods: one of twenty years and seven months, from June 1st, 1852, to December 31, 1872, inclusive; one of ten years, from 1873 to 1882, inclusive; and one of ten years, from 1883 to 1892, inclusive :

* Exclusive of Providence city.

TABLE LV.

PERIODS OF LIFE.	1901.	1900.	1899.	1898.	1897.	1896.	1895.	1894.	1893.	10 years, 1883 to 1892.	10 years, 1873 to 1882.	20 years, 6 months, 1862 to 1872.
Under one year.....	21.1	23.4	22.7	22.9	22.5	24.4	21.7	23.1	23.2	20.4	18.9	17.8
1 and under 2.....	4.9	5.7	5.1	4.7	4.9	4.7	5.3	4.8	5.2	5.6	7.6	8.8
2 and under 5.....	4.1	5.1	4.2	4.1	4.5	5.9	6.2	5.1	5.3	5.8	8.1	8.7
Total.....	30.1	34.2	32.0	31.7	31.9	35.0	33.2	33.0	33.7	31.8	34.0	35.3
5 and under 10.....	2.3	2.8	2.1	2.4	2.5	3.1	3.6	2.7	3.9	3.5	5.0	4.8
10 and under 20.....	3.8	3.6	3.7	3.8	4.4	4.4	4.2	5.1	4.5	5.1	5.8	6.0
20 and under 30.....	8.2	7.7	7.2	8.0	8.0	8.0	8.6	8.6	7.9	8.7	9.2	9.6
30 and under 40.....	7.8	7.2	8.4	8.1	7.7	8.0	7.5	7.4	8.0	7.9	7.8	8.4
40 and under 50.....	9.0	7.7	7.9	8.1	7.6	7.6	8.0	8.5	8.4	7.5	6.9	7.3
50 and under 60.....	10.3	9.9	9.7	10.1	8.5	8.9	8.6	8.9	8.9	8.5	7.2	7.0
60 and under 70.....	11.5	10.5	11.1	11.1	11.5	10.0	10.3	10.2	10.0	9.7	8.2	7.6
70 and under 80.....	10.4	10.1	11.2	10.1	10.9	9.0	9.8	9.3	8.9	9.9	8.8	7.2
80 and under 90.....	5.6	5.4	5.6	5.6	6.0	5.0	5.3	5.0	4.8	5.9	5.1	5.1
Over 90 and not stated.....	1.0	0.9	1.1	1.0	1.0	1.0	0.9	1.3	1.0	1.5	1.1	1.1
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Compared with the average of thirty years, ending with 1882, the average proportion of the mortality of children under one year of age, during the last nine years, was 4.6 per cent., or about 46 in every one thousand deaths more than the average in the longer period.

The proportions in the other periods were not greatly different from previous years, although there was some increase of percentage in the age periods above fifty years.

The following Table will present the varying proportions of deaths to whole number of deaths, in four different periods of life, from 50 years of age to 90 years, grouped in four periods of averages of ten years each, 1853-1892; in 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, and 1901.

TABLE LVI.

AGE OF DECEDENTS.	1st Decade, 1853-1862.		2d Decade, 1863-1872.		3d Decade, 1873-1882.		4th Decade, 1883-1892.		1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>
50 to 60	6.7	7.3	7.2	8.5	8.9	8.9	8.6	8.9	8.5	10.1	9.7	9.9	10.3				
60 to 70	6.9	8.3	8.2	9.7	10.0	10.2	10.3	10.0	11.5	11.1	11.1	10.5	11.5				
70 to 80	7.3	8.4	8.8	9.9	8.9	9.3	9.8	9.0	10.9	10.1	11.2	10.1	10.4				
80 to 90	4.6	5.4	5.1	5.9	4.8	5.0	5.3	5.0	6.0	5.6	5.6	5.4	5.6				

COLORED DECEDENTS.

There were 257 deaths of persons of color during 1901.

The towns from which they were returned, and number in each, were as follows :

Providence City.....	150
Bristol.....	3
East Greenwich.....	5
Warwick	3
Jamestown.....	1
Newport City.....	36
New Shoreham.....	1
Portsmouth	1
Cranston	15
East Providence.....	6
Johnston	1
North Providence.....	1
Pawtucket	4
Charlestown.....	5
Hopkinton.....	2
Narragansett.....	1
North Kingstown.....	2
South Kingstown.....	12
Richmond	1
Westerly.....	7
Total.....	257

Months.	Deaths.	Months.	Deaths.	Months.	Deaths.	Months.	Deaths.
January.....	19	April.....	17	July.....	21	October.....	18
February.....	22	May.....	20	August.....	19	November.....	20
March.....	30	June.....	22	September.....	23	December.....	26
	—		—		—		—
First Quarter.....	71	Second Quarter.....	59	Third Quarter.....	63	Fourth Quarter ..	64

First six months, 130; second six months, 127. Total, 257.

The following summary will show the proportion, to the whole colored population, of each of the events of birth, marriage, and death of colored persons, during the twenty-four years from 1878 to 1901, inclusive :

	One Birth in every	One Person Married in every	One Death in every
1878.....	36.4	39.2	40.2
1879.....	39.6	51.4	37.3
1880.....	47.1	43.3	44.0
1881.....	34.3	39.2	35.4
1882 ..	36.8	44.5	45.4
1883.....	33.4	63.3	39.7
1884.....	34.8	46.0	34.5
1885.....	36.7	51.7	40.1
1886.....	34.6	43.2	37.8
1887.....	35.8	38.9	37.2
1888.....	37.6	55.0	38.0
1889 ..	38.7	52.0	40.0
1890.....	45.3	57.6	41.0
1891.....	42.8	41.2	36.4
1892.....	40.6	38.5	31.3
1893.....	38.6	44.2	31.3
1894.....	34.3	56.6	34.2
1895.....	35.9	42.6	32.1
1896.....	35.1	38.9	37.9
1897.....	38.5	36.0	41.3
1898 ..	37.9	48.2	41.8
1899.....	39.4	41.7	36.0
1900.....	39.5	37.4	37.7
1901.....	35.5	44.3	35.5

In every one thousand of the colored population there were, in 1901 :

Of Births.	Of Persons Married.	Of Deaths.
28.2.....	22.6.....	28.2

The following exhibit will show the number of living births, marriages, and deaths among the colored population of Rhode Island, during ten years, from 1861 to 1870, inclusive; ten years, from 1871 to 1880, inclusive; ten years, from 1881 to 1890, inclusive; ten years, from 1891 to 1900, inclusive; for the year 1901; and the aggregate of the same.

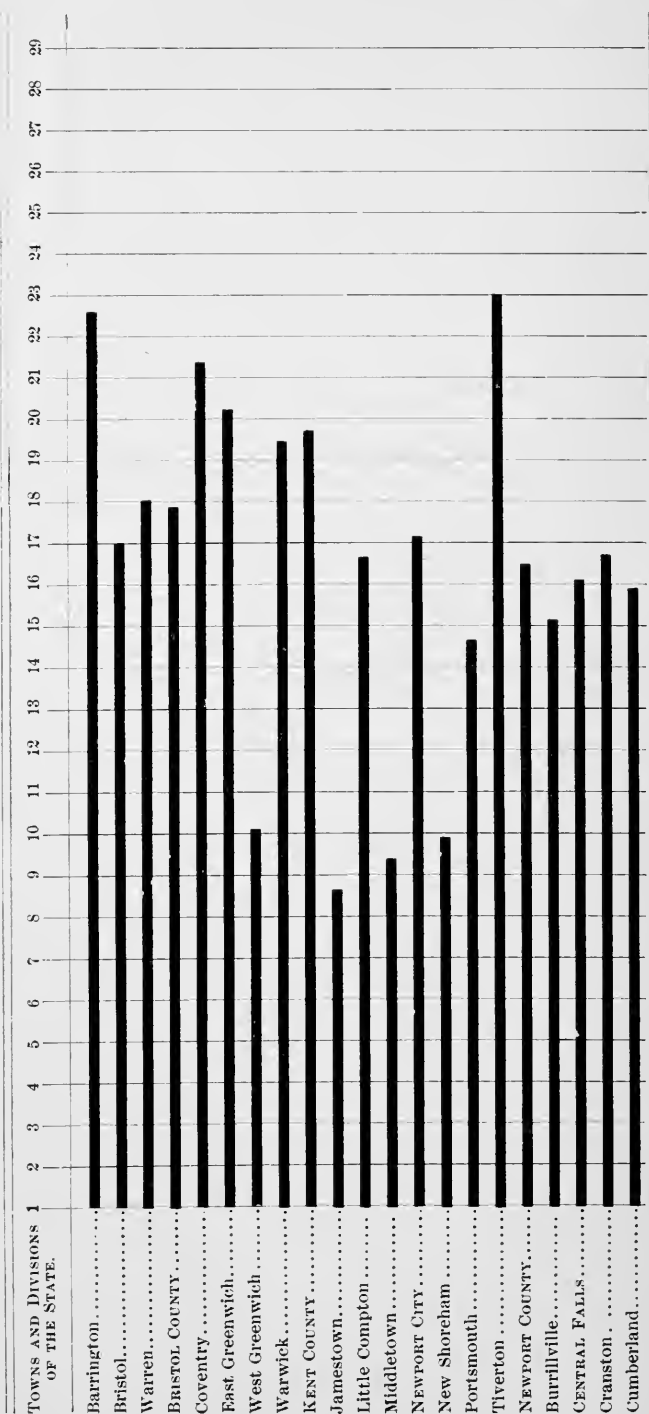
10 years, 1861-1870.....	1,131 births.....	557 marriages.....	1,153 deaths.
10 years, 1871-1880.....	1,615 births.....	705 marriages.....	1,573 deaths.
10 years, 1881-1890.....	1,954 births.....	752 marriages.....	1,860 deaths.
10 years, 1891-1900.....	2,080 births	957 marriages.....	2,218 deaths.
1901.....	252 births.....	103 marriages.....	257 deaths.
<hr/>			
Total, 41 years	7,032 births.....	3,074 marriages.....	7,061 deaths.

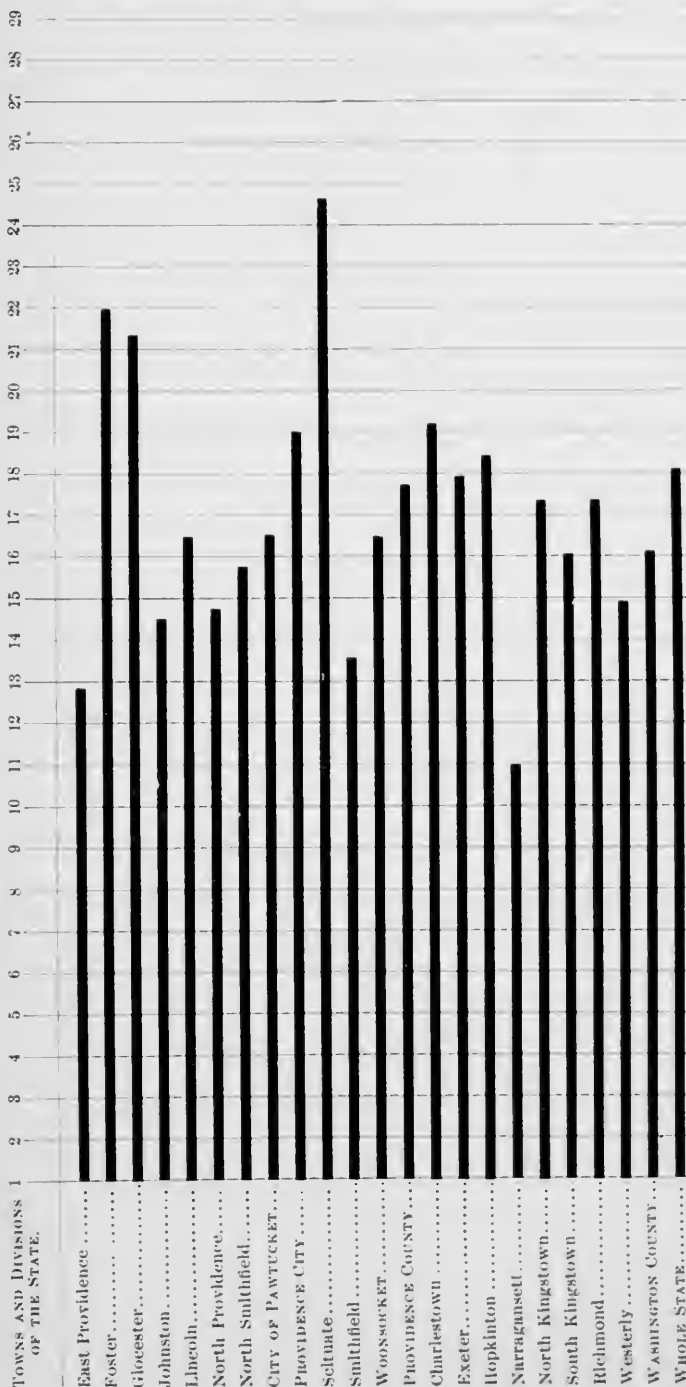
During the first ten years (1861-1870) there were 22 more deaths than births; during the second ten (1871-1880), 42 more births than deaths; during the third ten (1881-1890), 94 more births than deaths; and in the last ten (1891-1900), 138 more deaths than births. During 1901 the number of births was 5 less than the number of deaths.

DEATH RATES.

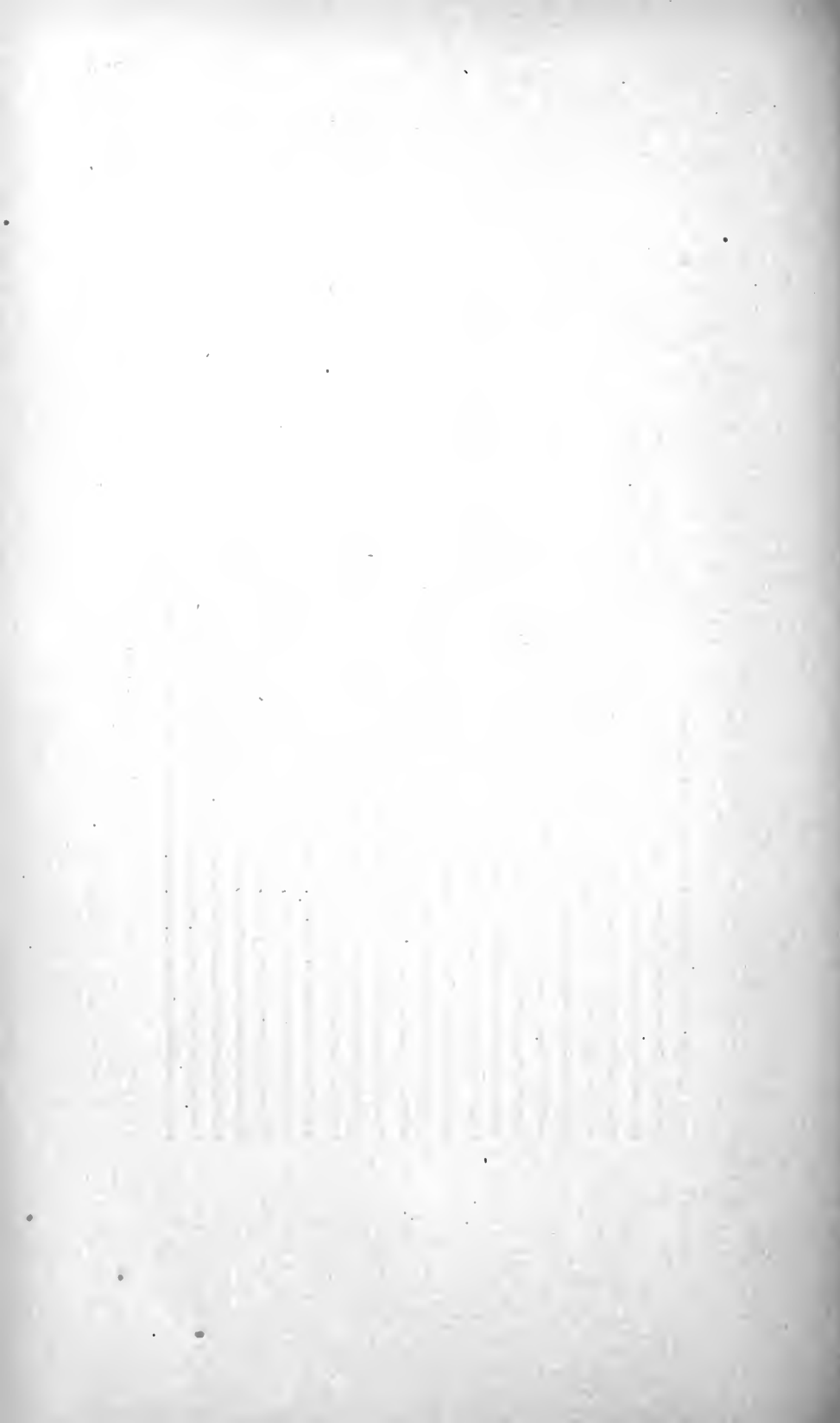
Diagram II.—Showing the Number of Deaths in every 1,000 of the Population, in each Town and each County in the State, during the Year 1901, computed upon an estimated increase of the Population by the Census of 1901.

For explanation see foot-note on next page.





The figures at the top of the perpendicular lines indicate, in whole numbers, the number of deaths during the year in every 1,000 persons. The spaces are fractional parts of one. For instance, the heavy horizontal line against Barrington, at the top of this diagram, reaches across five-tenths of the space between the perpendicular lines 22 and 23. It shows the death rate of Barrington, in 1901, was twenty-two and five-tenths in every 1,000 of the population.



CAUSES OF DEATH, 1901.

The statistics of the causes of death in Rhode Island, in 1901, may be found in Tables VII, VIII, IX, and X. The whole number of deaths, as previously stated, was 7,966, which was 857 less than the number returned in 1900, and 508 greater than the number reported in 1899. The number of which the cause of death was reported was 7,924, and the number of which the cause was not stated was 42.

The following Table shows the number of deaths, in 1901, in each large division of the State, and the number and proportion in each division from which causes were reported unknown :

TABLE LVII.

	Bristol County.	Kent County.	Newport County Towns.	Providence County Towns.	Washington County.	Newport City.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Whole State.
Number of deaths.....	240	601	161	1,294	394	386	300	667	3,444	479	7,966
Cause not stated.....	1	2	.....	9	2	3	.....	3	19	2	42
One in.....	240	200	.....	144	197	129	.....	222	181	239	190

TABLE LVIII.

Proportion of Deaths reported with "Causes Unknown" in each Division of the State, for a period of forty-six years, from 1856 to 1901, inclusive.

YEARS.	STATE DIVISIONS.							In every 1,000 Deaths.
	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.	Whole State.	
1856-1860, One in every.....	18.1	5.0	7.2	5.5	30.7	7.3	9.4	106.8
1861-1865, One in every.....	32.1	13.1	16.1	7.9	39.3	23.7	15.1	66.0
1866-1870, One in every.....	83.9	8.9	26.7	7.1	61.8	16.4	14.1	70.9
1871-1875, One in every.....	38.6	8.6	13.1	9.9	83.4	13.6	17.1	58.4
1876, One in every.....	11.5	7.9	18.5	9.9	124.3	22.8	19.3	45.8
1877, One in every.....	201.0	17.7	9.7	11.9	323.0	16.0	23.2	43.1
1878, One in every.....	32.1	7.4	9.0	13.7	124.2	21.7	21.1	47.4
1879, One in every.....	16.6	9.2	12.4	9.5	225.1	8.6	17.6	56.8
1880, One in every.....	21.9	23.5	13.5	10.5	122.3	17.8	20.7	48.3
1876-1880, One in every.....	31.9	17.2	19.9	18.1	39.6	26.9	25.2	39.7
1881, One in every.....	204.0	13.0	11.2	7.3	143.0	6.5	14.4	69.4
1882, One in every.....	37.6	11.6	10.9	10.6	187.0	7.7	18.8	53.2
1883, One in every.....	40.4	15.9	15.0	15.3	392.8	17.0	28.4	36.2
1884, One in every.....	100.0	40.0	81.6	91.7	372.1	90.4	122.4	8.2
1885, One in every.....	185.0	355.0	137.0	45.6	309.1	52.2	91.3	10.9
1881-1885, One in every.....	75.4	20.1	18.8	15.7	242.2	14.0	28.6	34.9
1886, One in every.....	110.5	192.5	86.0	87.0	195.1	55.2	113.7	7.3
1887, One in every.....	212.0	343.0	73.5	782.6	264.0	351.0	333.7	3.0
1888, One in every.....	251.0	408.0	152.7	164.3	293.8	368.0	235.7	4.3
1889, One in every.....	208.0	152.0	221.0	176.7	120.0	338.0	160.0	6.2
1890, One in every.....	.....	.....	236.0	109.0	190.0	159.0	161.0	6.2
1886-1890, One in every.....	566.0	413.0	125.1	154.8	189.0	171.2	177.6	5.6
1891, One in every.....	.....	.....	598.0	159.0	175.0	154.0	194.0	5.1
1892, One in every.....	.....	.....	591.0	240.0	212.0	184.0	264.0	3.8
1893, One in every.....	228.0	96.3	64.2	70.2	224.0	307.0	109.9	9.1
1894, One in every.....	.....	192.3	173.0	91.6	144.9	402.0	130.2	7.7
1895, One in every.....	.....	522.0	122.7	280.6	90.9	123.7	144.9	6.9
1891-1895, One in every.....	1,155.0	277.5	159.6	126.5	151.8	195.2	152.5	6.6
1896, One in every.....	.....	116.6	.....	707.5	155.6	382.0	258.8	3.9
1897, One in every.....	231.0	536.0	127.7	139.5	187.4	.....	284.4	3.5
1898, One in every.....	.....	172.0	164.6	596.2	366.1	184.5	345.2	2.9
1899, One in every.....	125.3	287.0	188.0	636.7	351.3	180.0	339.0	2.9
1900, One in every.....	297.0	354.0	305.0	281.0	282.9	109.8	267.3	3.7
1896-1900, One in every.....	302.8	224.4	225.9	500.1	242.8	213.3	293.0	3.4
1901, One in every.....	240.0	200.3	182.3	195.7	181.3	197.0	190.0	5.3

* Not including Providence city.

TABLE LIX.

Exhibiting the Order in regard to Number and Proportion of Decedents from Thirteen Principal Causes of Death.

1901.	1900.	1899.	1898.	1897.	January 1st, 1888, to January 1st, 1897— 10 years.	June 1st, 1852, to December 31st, 1887— 35 years, 7 months.	Per 1,000 of Whole Number of Deaths, 35 years, 7 months.
Whole Number 7,966	Whole Number 8,822	Whole Number 7,458	Whole Number 6,905	Whole Number 7,110	Whole Number 70,352	Whole Number.....129,231	
Consumption..... 900	Consumption..... 987	Consumption..... 972	Consumption..... 886	Consumption..... 777	Consumption... 7,767	Consumption..... 19,847	154.3
Pneumonia..... 742	Pneumonia..... 966	Pneumonia..... 686	Pneumonia..... 549	Pneumonia..... 635	Pneumonia..... 6,213	Pneumonia..... 8,298	64.5
Heart Diseases.. 685	Heart Diseases.. 701	Heart Diseases.. 648	Pneumonia..... 542	Heart Diseases.. 570	Cholera Inf'm... 5,193	Cholera Infantum..... 6,821	53.1
Kidney Diseases, 505	Cholera Inf'm... 557	Kidney Diseases, 477	Kidney Diseases, 471	Apoplexy..... 469	Heart Diseases . 4,959	Old Age..... 6,797	53.0
Apoplexy, etc... 499	Kidney Diseases, 516	Cholera Inf'm... 473	Cholera Inf'm... 468	Cholera Inf'm... 425	Apoplexy..... 3,885	Heart, Diseases of..... 5,642	43.6
Cholera Inf'm... 401	Apoplexy..... 506	Apoplexy..... 457	Apoplexy..... 416	Kidney Diseases, 387	Kidney Diseases 2,893	Dysentery and Diarrhoea 5,166	40.1
Accidents..... 346	Accidents..... 336	Cancer..... 292	Brain Diseases.. 327	Brain Diseases.. 328	Bronchitis..... 2,663	Apoplexy and Paralysis, 5,050	39.2
Enteritis..... 343	Bronchitis..... 295	Accidents..... 276	Accidents..... 296	Accidents..... 293	Accidents..... 2,518	Scarlet Fever..... 4,974	38.5
Cancer..... 306	Cancer..... 292	Brain Diseases.. 287	Cancer..... 279	Cancer..... 254	Brain Diseases.. 2,449	Fever, Typhoid, etc.... 4,632	36.1
Brain Diseases.. 281	Brain Diseases.. 290	Bronchitis..... 241	Bronchitis..... 236	Diphtheria..... 231	Old Age..... 2,088	Accidents, all kinds.... 3,921	30.3
Old Age..... 234	Influenza..... 255	Old Age..... 228	Enteritis..... 233	Enteritis..... 231	Cancer..... 2,038	Diphtheria*..... 3,777	29.2
Bronchitis..... 232	Old Age..... 250	Influenza..... 219	Old Age..... 205	Bronchitis..... 226	Diphtheria..... 1,921	Convulsions..... 2,859	22.1
Diphtheria..... 177	Enteritis..... 238	Enteritis..... 212	Diphtheria..... 93	Old Age..... 159	Fever, Typhoid, 1,545	Croup..... 2,461	19.1

* 30 years, 1858 to 1887, inclusive.

The number of deaths from consumption, in 1901, was 3 more than in 1900.

From pneumonia there was a decrease of 224 deaths from that of the previous year. The fatality from pneumonia, however, has been slowly increasing, in proportion to whole number of deaths, for the last twenty years.

From diseases of the heart there was a decrease of 16 deaths from 1900. Diseases of the heart have been steadily increasing as causes of death, the mortality in 1900 being the largest ever recorded in this State.

From kidney diseases there was a decrease of 11 from the number in 1900.

There were 306 deaths from cancer in 1901, an increase of 14 over the number in 1900.

COMPARATIVE STATISTICS AND COMMENTS.

There have been presented in the preceding pages, numerically and in tabular form, the different causes of death in Rhode Island, in 1901, with various summaries and illustrations. In Tables VII and VIII they were presented at considerable length, in various specific terms; in Table IX more or less grouped in a general nosological arrangement; and in Table X the same for a period of forty-seven years.

In Table VII the number of deaths from *each cause* and of *each sex* is shown, for *each month* in the year, and the *nativity* and *parentage* of the decedents from *each cause* during the year.

In Table VIII the number of decedents of *each sex*, from *each cause*, in the *different periods of life*, is given.

In Table IX, with the Bertillon classification and percentage of causes of death, the number of each general cause, in each division of larger population, is given.

In Table X a nosological summary of causes of death for the whole State, in each of forty-nine years, is given, arranged by the Bertillon system.

Table LX is a compend, in part, of Tables VII, VIII, and IX, previously alluded to, and contains the particulars of the most important causes of death in 1901, and comprises the principal causes which will be commented upon in the following pages:

TABLE LX.

Deaths in Rhode Island from Twenty-six Principal Diseases.

	Accidents.	Apoplexy and Paralysis.	Appendicitis.	Brain Diseases.	Bronchitis.	Cancer.	Cholera Infantum.	Consumption.	Croup.	Diabetes.	Diphtheria.	Diarrhoea and Dysentery.	Enteritis.	Fever, Typhoid.	Heart Diseases.	Influenza.	Kidney Diseases.	Liver Diseases.	Measles.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Scarlet Fever.	Stomach Diseases.	Whooping Cough.
TOTAL MORTALITY.....	346	499	42	281	232	306	401	990	24	81	177	96	343	103	685	146	505	100	15	234	24	742	29	21	91	17
SEX.....																										
{ Males.....	267	223	28	143	111	97	215	524	11	38	92	43	173	62	341	55	266	54	10	83	10	400	8	10	45	6
{ Females.....	79	276	14	138	121	209	186	466	13	43	85	53	170	41	344	91	239	46	5	151	14	342	21	11	46	11
PARENTAGE.....																										
{ Native.....	123	233	27	103	88	145	132	299	7	48	67	35	110	34	303	79	224	31	3	147	13	324	9	9	36	9
{ Foreign.....	223	246	15	178	144	161	269	691	17	33	110	61	233	69	382	67	281	69	12	87	11	418	20	12	55	8
SEASON.....																										
{ January.....	20	56	1	24	29	25	4	85	2	10	24	3	19	10	66	38	44	5	2	20	2	109	4	...	9	2
{ February.....	23	43	1	22	26	22	4	73	4	4	14	3	8	4	66	48	42	8	1	26	4	123	...	...	2	2
{ March.....	28	44	3	29	42	32	6	107	2	12	21	2	7	8	71	27	53	10	...	10	5	100	2	...	3	3
{ April.....	16	49	3	25	30	24	6	87	3	4	10	...	12	6	56	13	50	7	...	15	3	99	1	1	3	1
{ May.....	27	31	6	16	15	27	1	97	1	2	9	5	9	4	49	9	40	7	3	22	1	63	4	5	6	2
{ June.....	33	41	2	16	6	24	22	78	1	7	14	2	14	5	48	3	38	9	...	20	2	31	2	4	5	1
{ July.....	65	36	5	25	5	31	118	74	1	6	11	12	61	6	56	...	38	12	...	19	...	10	2	1	10	...
{ August.....	31	28	6	30	2	25	118	71	...	6	9	26	79	8	51	...	52	7	...	24	4	18	3	3	14	1
{ September.....	27	36	5	31	12	26	86	71	1	8	10	26	53	12	51	1	29	11	1	14	1	25	...	...	19	1
{ October.....	23	44	4	18	21	28	23	85	1	6	14	11	50	14	64	...	43	7	1	22	1	30	...	...	3	1
{ November.....	22	51	4	24	26	20	9	83	5	6	29	4	19	8	52	3	41	6	2	20	...	52	4	3	4	2
{ December.....	31	40	2	21	18	22	4	79	3	10	12	2	12	18	55	4	55	11	5	22	1	82	4	2	11	1

TABLE LX.—Concluded.

	Accidents.	Apoplexy and Paralysis.	Appendicitis.	Brain Diseases.	Bronchitis.	Cancer.	Cholera Infantum.	Consumption.	Croup.	Diabetes.	Diphtheria.	Diarrhea and Dysentery.	Enteritis.	Fever, Typhoid.	Heart Diseases.	Influenza.	Kidney Diseases.	Liver Diseases.	Measles.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Scarlet Fever.	Stomach Diseases.	Whooping Cough.
Under 5 years.....	61	7	...	169	124	...	401	117	21	1	120	34	251	6	14	16	12	4	14	...	3	185	12	14	4	17
5 to 10 years.....	29	...	4	14	1	...	...	14	3	2	43	4	7	2	12	3	5	...	...	...	1	20	1	4	3	...
10 to 15 years.....	21	...	3	6	...	...	...	20	...	3	5	...	6	4	9	...	4	...	...	...	...	5	2	3	1	...
15 to 20 years.....	13	1	3	10	1	...	...	79	...	2	2	1	2	12	5	2	9	2	...	...	...	1	21	2	3	...
20 to 30 years.....	46	4	12	12	3	4	...	276	...	6	3	4	9	25	40	4	37	1	...	...	4	49	4	...	2	...
30 to 40 years.....	31	11	3	12	4	24	...	204	...	6	3	3	5	29	53	9	52	13	...	...	4	57	3	...	3	...
40 to 50 years.....	43	32	11	22	3	68	...	117	...	15	1	4	10	16	65	6	68	24	1	...	...	1	91	2	...	...
50 to 60 years.....	...	32	96	4	14	7	68	...	82	20	3	10	9	5	124	18	92	25	...	...	3	94	4	...	18	...
60 to 70 years.....	34	133	2	14	29	88	...	51	...	14	...	9	17	3	152	29	112	13	...	...	4	93	9	...	17	...
70 to 80 years.....	22	137	...	6	36	35	...	27	...	10	...	18	16	1	139	35	85	15	...	...	81	1	...	...	...	...
80 years and over.....	13	78	...	2	24	19	...	2	...	2	...	9	11	...	68	24	29	3	...	...	153	2	49	1	...	...
Not stated.....	1	...	...	...	...	...	...	1	...	...	...	...	...	...	2	...	...	...	...	...	...	1	...	...	...	...
Bristol County.....	12	26	...	7	...	6	6	25	1	...	2	8	18	7	20	8	20	3	...	...	13	1	24	...	...	...
Kent County.....	21	45	1	25	16	13	38	55	8	4	13	10	24	5	46	6	33	8	1	...	18	1	69	2	...	...
Newport County Towns..	8	20	1	7	3	13	9	10	...	2	3	1	6	3	16	2	8	4	...	...	7	...	10	...	...	...
Newport City.....	10	31	...	22	4	22	11	45	...	5	1	1	9	8	44	1	25	3	...	...	26	1	36	...	...	...
Providence County Towns	60	69	1	65	33	50	64	157	4	14	27	12	41	16	118	22	111	15	2	...	39	3	129	5	...	...
Central Falls.....	6	16	...	17	24	7	25	44	...	2	7	1	9	3	22	4	11	3	4	...	7	3	29	...	...	...
Pawtucket.....	22	43	2	26	22	21	37	76	...	6	2	7	21	6	74	19	28	9	1	...	21	5	71	3	...	...
Providence City.....	175	181	33	90	100	142	146	474	6	39	84	49	177	46	273	67	231	46	3	...	76	11	283	17	...	...
Woonsocket.....	14	27	2	19	15	12	61	60	4	3	11	5	24	3	31	7	17	4	3	...	9	1	33	2	...	...
Washington County.....	18	41	2	3	15	20	4	44	1	6	2	2	14	6	41	10	21	5	1	...	22	1	48	...	...	...

LOCALITIES.

DEATHS FROM ACCIDENTS.

The number of deaths from accidental causes in Rhode Island, in 1901, was 346.

Among the deaths from accidents there were 33 from asphyxia; 4 by bicycle; 36 by burns and scalds; 57 by drowning; 11 by electric car; 3 by electrical shocks; 4 by elevator; 14 by exposure to cold and storm; 61 by falls; 5 by firearms; 37 by insolation; 6 by poison; 33 by railroad; and 42 by various other accidents.

Asphyxia.—By bed-clothing or overlaying, 11 (infants); by illuminating gas, 7 (adults); by carbureted water-gas from gas stove, 2 (adults); by smoke in burning house, 1 (child); by smoke from burning kerosene stove, 1 (adult); by hot air in room heated by gas stove, 1 (adult); by foreign substance in larynx or trachea, 6 (4 children, 2 adults); by anæsthesia (weak heart), 1; by chloroform during operation, 1; by ether narcosis during operation, 2. Total 33.

Bicycle.—Knocked down by bicycle, 3 (ages 10, 52, 65 years); in collision with team, 1 (age 17 years).

Burns and Scalds.—By bonfire, 5 (2 adults and 3 children); playing with matches, 6; by clothes taking fire from stove, 6 (2 adults and 4 children); from gas stove, 1 (adult); from plumber's furnace, 1 (child); explosion of powder while making fireworks, 1; explosion of kerosene lamp, 1 (adult); explosion of oil stove, 1 (adult); kindled fire with kerosene, 1; by upset kerosene lamp, 1 (child); upset hot water, 5 (children); upset hot coffee, 1 (child); by falling into hot water, 4 (children); in some manner unknown, 2. Total 36.

Drowning.—While bathing or swimming, 17 (of these, 13 were under 20 years of age); through ice, 10 (ages 1 at 6, 3 at 7, 2 at 9, and 1 at 10, 15, 21, and 40 years); by falling overboard from boats, 4 (adults); by capsized small boats, 2 (adults); by upset canoes, 2 (ages 14 and 29 years); from rocks while fishing, 2 (ages 10 and 49 years); while clamming, 1 (adult); by bursting of dam, 1 (adult); by falling into water while playing on bank or dock, 2; while playing in old boat or on raft, 2; found in water, circumstances unknown, 14. Total 57.

Electric Car.—Of the persons killed by electric cars, 3 jumped or fell from moving cars; 7 were struck by car while crossing track or lying beside it; and 1 in collision of car and lowgear. Total 11.

Electric Shock.—Shocked by electricity at electric-light works, 1; while turning on electricity in basements of their houses, 2. Total 3.

Elevator.—By falling into well, 2 (ages 13 and 16 years); by fall across hatchway, 1 (age 14 years); by being hurled through door of elevator onto floor, control of elevator being lost, 1 (age 16 years). Total 3.

Falls.—Downstairs or steps, 5 (ages 5, 45, 55, 70, 80 years); from building or staging, 8 (ages 23, 35, 4 from 40 to 50, 1 at 58, and 1 at 75 years); from windows, 3 (ages 7, 41, 81 years); on floor, ground or sidewalk, 30 (of these, 18 were over 60 years of age); on ice, 3 (ages 13, 70, 72 years); from railroad track into coal-pocket, 2 (adults); from fence, 1 (child); from team, 1 (child); from apple-tree, 1 (age 78 years); from load of hay, 1 (age 68 years); from railroad bridge, 1 (age 72 years); down chute, 1 (adult); on barge while unloading coal, 1; into hold of vessel, 1; against stones in well, 1 (adult); on piece of timber, 1 (adult). Total 61.

Firearms.—By accidental discharge of shotgun in hands of others, 2 (ages 5 and 13 years); random shot by person who was shooting at rats in barn, 1 (age 8 years); shot through lung while out shooting in a canoe, 1 (age 14 years); shot during the war (necrosis of femur), 1. Total 5.

Poison.—Oxalic acid administered to child for rochelle salts, 1; strichnia tablets mistaken by child for candy, 1; swallowed toothache mixture containing iodine, 1 (child); excessive dose of morphine, 1 (adult); methyl alcohol drank as a beverage, 1 (adult); overdose of medicine given child for whooping cough, 1. Total 6.

Railroad.—Of the 11 employees who were killed, 2 fell from moving cars, 1 was struck by overhead bridge, 2 were coupling cars, 2 (crossing-tenders) were struck by trains while flagging crossings, 1 (section-hand) asleep so near the track that he was struck by passing train, 1 (interlocker) was run over while crossing track, 1 (lamplighter in freight-yard) was struck by engine while lighting switch-lights, and 1 (freight conductor) stepped off car directly in front of another train. Of the remainder, 4 persons

while attempting to cross tracks were killed at grade crossings by crawling under gates which were down, 3 attempted to board moving trains, 2 by alighting from moving trains, 1 fell from train, 9 were walking on or crossing tracks, 1 was crossing track on a bicycle, 1 was lying on track, and 1 child was struck by engine while playing on track. Total 33.

Accidents, Various.—Blasting accident (premature explosion of dynamite), 1; 2 by explosion of steam cylinder; thrown from carriage or wagon, 7 (adults); run over by heavy teams, 5 (4 children and 1 adult); crushed between tipcart and wall, 1 (age 11 years); knocked down by horse, 2 (ages 4 and 56 years); kicked by horse, 2 (adults); dragged by cow, 1 (child); crushed by falling building, 2; crushed by roof of building, 1; by falling barrel of beer, 1; under pile of horseshoes, 1; by heavy box, 1 (child); by falling derrick, 1; by stone from derrick, 1; by falling plank, 1; by breaking of stone-crusher, 1; twisted about capstan, 1; penetrating wound at base of brain made by sharp-pointed wire, 1; wound made by rusty iron (septicæmia resulting), 1; fractured skull (during hypnotic performance) by heavy stone falling on head, 1; severed femoral artery (hemorrhage), 1; dog-bite of finger (septicæmia), 1; bruise of foot (gangrene), 1; unspecified injury to spine, 1; unspecified injury to head, 2; unspecified accident, 1. Total 42.

Comparison of the number of deaths from street-car accidents during the last five years presents the following figures :

	Struck by cars.	Collision of cars.	Otherwise.	Total.
1897.....	4.....	1.....	2.....	7
1898.....	6.....	0.....	1.....	7
1899.....	3.....	1.....	1.....	5
1900.....	8.....	6.....	5.....	19
1901.....	7.....	1.....	3.....	11

As a result of inattention on the part of those having the care of children, 4 fell into hot water while the attention of the mother was engaged elsewhere, the receptacles containing the hot water being left sufficiently convenient for the children to climb or fall into them; 6 others upset, by pulling over upon themselves, hot water or coffee; 1 upset a kerosene lamp; 9 children received burns which caused death as the result of playing with bonfires or matches.

It is interesting to note the large number of cases resulting

from fractures of the long bones as the sequence of a slight fall. This is especially noticeable in fractures of the hip in old people. Out of the 61 who died from the result of falls, 27 were over 60 years of age.

Of the whole number of deaths by accidents, 267 were males and 79 were females; 123 were of native and 223 were of foreign parentage, or 35.5 per cent. of native to 65.5 per cent. of foreign.

Of the sexes, the proportion was 77.2 per cent. of male decedents to 22.8 of female decedents.

In regard to the periods of life, the decedents from accidental causes were divided as follows: under 5 years, 61; 5 and under 10, 29; between 10 and 20, 34; between 20 and 40, 77; between 40 and 60, 75; over 60, 70.

In regard to sectional divisions of the State, 12 of the deaths from accidental causes were in Bristol county; 21 in Kent county; 18 in Newport county; 277 in Providence county; and 18 in Washington county.

The whole number of deaths from accidental causes, in 1901, *in proportion to the whole number of deaths* in the State, was 43 in every one thousand. The number in proportion to the whole *population* was .79 in every one thousand.

The number of deaths by accidents in each division of the year was as follows:

First Quarter.....	71	Third Quarter.....	123
Second Quarter.....	76	Fourth Quarter.....	76
First half.....	147	Second half.....	199
Whole year.....		346	

In the following Table may be found the number, sex, parentage, and locality of mortality from accidents, for thirty-six years, ending December 31, 1901:

TABLE LXI.

Mortality in the State from Accidents, with the Percentage of the Whole Number of Deaths; Sex, Parentage, and Locality, for thirty-six years, from 1866 to 1901, inclusive, in three periods of five years each, and for each of the last twenty-one years.

YEARS.	Whole Number.	VARIETIES.									SEX.		PARENT-AGE.		STATE DIVISIONS.					
		Burns and Scalds.	Drowning.	Falls.	Fractures and Con- tusions.	Poisoning.	Railroad.	Suffocation.	Various and Un- specified.	Per cent.	Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870.	490	77	124	89	....	14	43	....	143	2.18	375	115	238	252	22	34	46	187	162	39
5 years, 1871-1875.	610	78	164	90	....	21	71	....	186	2.97	493	117	283	327	26	46	50	200	240	48
5 years, 1876-1880.	607	75	166	69	....	28	58	14	197	2.72	450	157	249	358	17	53	47	178	281	31
1881.....	155	16	29	19	....	9	20	19	43	3.09	107	48	62	93	5	17	12	60	56	5
1882.....	178	17	40	31	....	6	16	8	60	3.50	130	48	72	106	5	9	15	60	80	9
1883.....	153	18	27	21	....	6	16	12	53	2.83	117	36	61	92	4	8	9	63	66	3
1884.....	197	20	41	31	....	7	16	11	71	3.82	147	50	90	107	5	19	14	65	76	18
1885.....	173	19	42	25	....	9	15	9	54	3.20	135	38	72	101	5	6	8	58	83	13
1881-1885.	856	90	179	127	....	37	83	59	281	3.26	636	220	357	499	24	59	58	306	361	48
1886.....	190	23	58	19	....	6	20	9	55	3.25	141	49	84	106	16	11	16	62	72	13
1887.....	206	17	39	17	23	7	24	14	65	3.24	158	48	92	114	5	11	23	81	71	15
1888.....	190	27	46	18	8	12	25	8	46	2.87	145	45	63	127	4	6	14	70	88	8
1889.....	216	20	52	31	25	7	23	9	49	4.10	146	70	88	128	2	14	13	73	101	13
1890.....	250	20	71	32	26	11	31	12	47	3.60	199	51	99	151	7	17	24	75	111	16
1886-1890.	1052	107	266	117	82	43	123	52	262	3.29	789	263	426	626	34	59	90	361	443	65
1891.....	233	18	52	21	29	16	30	17	50	3.54	174	59	78	155	5	18	16	95	89	10
1892.....	309	21	48	33	60	20	29	8	90	4.18	225	84	115	194	8	13	21	100	158	9
1893.....	264	26	47	25	25	14	39	14	74	3.55	195	69	88	176	9	21	21	75	126	12
1894.....	234	28	52	29	20	8	36	21	40	3.27	189	45	74	160	6	24	18	88	81	17
1895.....	293	28	61	57	2	8	36	26	75	3.89	233	60	88	205	6	23	13	85	141	25
1891-1895.	1333	121	260	165	136	66	170	86	329	3.69	1016	317	443	890	34	99	89	443	595	73
1896.....	296	25	39	48	....	8	36	24	116	3.94	226	70	101	195	6	25	24	85	139	17
1897.....	263	41	40	64	....	7	24	22	65	3.70	197	66	94	169	12	15	22	87	115	12
1898.....	296	21	60	58	....	8	30	19	100	4.29	233	63	111	185	11	18	26	85	134	22
1899.....	276	28	45	61	....	7	38	31	66	3.70	217	59	109	167	9	16	30	82	125	14
1900.....	336	33	64	72	....	16	26	29	96	3.81	254	82	110	226	15	30	12	101	159	19
1896-1900.	1467	148	248	303	....	46	154	125	443	3.88	1127	340	525	942	53	104	114	440	672	84
1901.....	346	36	57	60	18	6	33	33	103	4.34	267	79	123	223	12	21	18	102	175	18
Total, 36 years.	6761	732	1464	1020	236	261	735	369	1944	3.41	5153	1608	2644	4117	222	475	512	2217	2929	406

* Exclusive of Providence city.

TABLE LXII.

Mortality in the State from Alcoholism, with the Percentage of the Whole Number of Deaths, Sex, Parentage, and Locality, for thirty-six years, from 1866 to 1901, inclusive.

YEARS.	Number of Deaths from Alcoholism.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870..	62	.40	53	9	32	30	5	6	6	18	25	2
5 years, 1871-1875..	93	.45	73	20	37	56	2	6	9	25	48	3
5 years, 1876-1880..	79	.35	52	27	25	54	2	4	6	18	45	4
1881.....	21	.51	17	7	5	19	1	.....	1	7	14	1
1882.....	28	.58	16	12	8	20	.....	.....	.....	9	18	1
1883.....	29	.54	17	12	7	22	.....	1	1	10	16	1
1884.....	27	.53	19	8	10	17	.....	1	4	9	12	1
1885.....	22	.41	16	6	6	16	2	1	.....	11	7	1
1881-1885.....	130	.50	85	45	36	94	3	3	6	46	67	5
1886.....	12	.20	9	3	2	10	1	.....	1	3	7	.....
1887.....	16	.25	14	2	4	12	2	2	2	5	4	1
1888.....	16	.32	10	6	5	11	.....	.....	2	5	9	.....
1889.....	31	.50	23	8	12	19	2	1	1	13	14	.....
1890.....	25	.37	20	5	8	17	2	.....	.....	11	11	1
1886-1890.....	100	.31	76	24	31	69	7	3	6	37	45	2
1891.....	29	.47	22	7	8	21	1	1	4	10	13	.....
1892.....	36	.48	27	9	8	28	1	.....	4	12	17	2
1893.....	44	.59	34	10	15	29	.....	3	7	9	23	2
1894.....	39	.54	33	6	12	27	1	4	2	14	16	2
1895.....	24	.32	19	5	5	19	.....	.....	.....	10	13	1
1891-1895.....	172	.48	135	37	48	124	3	8	17	55	82	7
1896.....	34	.45	28	6	7	27	1	2	6	10	14	1
1897.....	36	.51	26	10	10	26	.....	1	5	11	15	4
1898.....	45	.65	37	8	13	32	.....	3	3	13	22	4
1899.....	34	.45	26	8	9	25	1	3	4	9	16	1
1900.....	62	.70	47	15	12	50	1	2	3	12	42	2
1896-1900.....	211	.56	164	47	51	160	3	11	21	55	109	12
1901.....	40	.50	35	5	13	27	2	2	3	15	17	1
Total, 36 years....	887	.44	673	214	273	614	27	43	74	269	438	36

APOPLEXY AND PARALYSIS.

There were 499 deaths from apoplexy and paralysis in Rhode Island, in 1901, according to the returns. The number reported is 7 less than in the year 1900.

The whole number of deaths from these two causes represents 6.27 per cent. of *all causes*, and a proportion of 1.14 to every one thousand of the population.

Of the sexes, there were 223 males and 276 females.

Of parentage, 253 were of native parentage, and 246 of foreign.

As observed in previous reports, the older native population has steadily been, in a very large proportion, more prone to apoplexy than the foreign, or the children of the foreign, population.

It will be observed that the proportion of deaths from apoplexy and paralysis, to the whole mortality from all causes, has steadily increased from about three and three-quarters per cent., during the first quinquennial (1866-1870), to nearly six per cent. during the quinquennial (1896-1900).

The following Table will present the sex, parental, and local relations of apoplexy and paralysis, as causes of death, during the last thirty-six years (Providence city not included in the Providence county statement):

TABLE LXIII.

Mortality in the State from Apoplexy and Paralysis, 1866 to 1901, inclusive.

YEARS.	Total Deaths for Year.	Number from Apoplexy and Paralysis.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
				Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	15,391	574	3.73	281	290	464	110	52	43	77	145	224	33
1871.....	3,344	156	4.66	73	83	113	43	10	17	15	40	61	13
1872.....	4,247	125	2.97	62	63	96	29	17	9	10	27	52	10
1873.....	4,403	134	3.04	59	75	109	25	9	8	17	26	57	17
1874.....	4,229	156	3.69	84	72	120	36	14	10	16	42	59	15
1875.....	4,317	166	3.61	79	87	133	33	7	13	17	46	75	8
1871-1875.....	20,540	737	3.59	357	380	571	166	57	57	75	181	304	63
1876.....	4,116	165	4.01	79	86	130	35	13	11	13	45	68	15
1877.....	4,450	181	4.07	87	94	123	58	10	10	16	52	74	19
1878.....	4,441	188	4.23	104	84	145	43	12	16	21	58	66	15
1879.....	4,472	220	4.92	114	106	146	74	12	9	29	71	89	10
1880.....	4,829	215	4.47	109	106	157	58	18	13	22	71	78	13
1876-1880.....	22,308	969	4.77	493	476	701	268	65	59	101	297	375	72
1881.....	5,016	244	4.86	116	128	170	74	17	15	25	70	101	16
1882.....	5,074	265	5.22	139	126	168	97	15	29	24	65	117	15
1883.....	5,282	275	5.22	138	137	192	83	11	28	22	75	118	21
1884.....	5,141	298	5.80	135	163	176	122	21	14	28	108	105	22
1885.....	5,389	289	5.38	144	145	183	106	16	18	28	99	110	18
1881-1885.....	25,902	1,371	5.29	672	699	889	482	80	104	127	417	651	92
1886.....	5,849	333	5.70	173	160	230	103	11	27	32	108	120	35
1887.....	6,340	328	5.17	161	167	213	115	21	27	23	101	128	28
1888.....	6,594	367	5.41	164	203	234	133	29	26	29	113	137	33
1889.....	6,259	323	5.17	140	183	204	119	23	32	28	101	106	33
1890.....	6,934	311	4.91	168	173	206	135	21	21	23	110	144	22
1886-1890.....	31,976	1,692	5.29	806	886	1,087	605	105	133	135	543	635	151
1891.....	6,620	335	5.08	160	175	207	128	17	29	32	118	118	21
1892.....	7,396	362	4.89	176	186	195	167	12	29	39	124	134	24
1893.....	7,440	407	5.47	206	201	227	180	21	28	26	138	171	23
1894.....	7,160	445	6.22	231	214	243	202	19	32	40	155	165	33
1895.....	7,535	417	5.54	199	218	238	179	18	29	30	150	153	37
1891-1895.....	36,151	1,966	5.71	972	994	1,110	856	87	148	167	685	741	138
1896.....	7,504	419	5.58	199	220	235	184	20	30	42	146	141	40
1897.....	7,110	469	6.70	229	240	263	206	13	31	40	175	184	24
1898.....	6,905	416	6.02	201	213	245	171	17	30	48	196	152	33
1899.....	7,458	457	6.13	210	247	290	227	19	32	36	154	179	37
1900.....	8,823	506	5.74	248	258	275	231	18	38	49	175	189	37
1896-1900.....	37,800	2,267	6.00	1,089	1,178	1,248	1,019	87	163	215	780	845	171
1901.....	7,966	499	6.27	223	276	253	246	26	45	51	155	181	41

* Not including Providence city.

TABLE LXIV.

Ages of Decedents from Apoplexy and Paralysis, in each of the last thirty-six years.

YEARS.	PERIODS OF LIFE.								Not stated.
	Under 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	
1866	1	1	7	16	9	24	27	7	.....
1867	2	.....	6	6	15	38	40	17	.....
1868	2	3	3	11	16	27	31	16	2
1869	1	1	5	12	20	28	34	15	1
1870	4	1	10	9	12	33	41	20	.....
1871	3	4	7	14	21	46	45	15	1
1872	1	4	5	17	20	26	41	11	.....
1873	2	3	4	14	22	35	37	16	1
1874	1	2	9	9	30	39	40	25	1
1875	6	2	8	19	23	40	45	22	1
1876	4	4	4	13	25	43	49	23	.....
1877	1	2	9	12	24	50	61	22	.....
1878	4	2	7	14	41	40	53	26	1
1879	4	6	11	18	27	57	59	38	.....
1880	1	2	8	18	21	59	70	34	2
1881	1	7	11	20	36	55	70	42	2
1882	4	5	14	28	41	57	77	38	1
1883	8	4	11	19	45	56	83	49	.....
1884	10	7	16	21	32	68	95	45	4
1885	8	5	7	25	29	76	94	44	1
1886	7	8	10	25	52	65	112	51	3
1887	12	6	13	26	50	90	96	35	.....
1888	10	4	18	29	61	85	100	60	.....
1889	6	6	11	36	45	87	92	39	1
1890	7	5	13	29	52	84	100	50	1
1891	4	6	15	24	61	88	90	47	.....
1892	3	6	17	40	60	91	95	49	1
1893	13	6	19	45	62	110	108	43	1
1894	12	5	16	39	88	108	111	65	1
1895	6	2	24	39	76	101	106	63	.....
1896	1	7	17	34	76	118	110	55	1
1897	3	3	12	37	77	136	144	57	.....
1898	3	8	12	37	75	108	117	54	2
1899	5	6	21	34	73	118	118	81	1
1900	6	5	19	42	97	134	131	71	1
1901	8	4	11	32	96	133	137	78	.....
Total	174	152	410	863	1,610	2,553	2,859	1,423	31

APPENDICITIS.

From a greater perfection in diagnosis of disease of the abdominal viscera, the disease known as appendicitis has received greater attention. This was probably reported in previous years under the head of diseases of the bowels, intussusception, or peritonitis.

During 1901, there were 42 deaths from appendicitis reported, and of this number operations were performed in 27 cases.

As there were 20 deaths from peritonitis in 1901, this would represent sixty-eight per cent. of the combined numbers.

Of the 42 cases of appendicitis, 28 were males, and 14 were females; 27 were of native and 15 of foreign parentage.

BRAIN DISEASES.

The number of decedents from diseases of the brain proper, in 1901, was 281.

This number represents 3.52 per cent. of *all causes*, and a proportion of .64 to every one thousand of the whole *population*.

Of the 281 decedents, 143 were males and 138 were females.

In regard to parentage, 103 were of native and 178 of foreign parentage.

The deaths in the different seasons of the year were as follows :

First Quarter.....	75	Third Quarter.....	86
Second Quarter.....	57	Fourth Quarter.	63
First half....	132	Second half.....	149
Whole year	281		

Brain diseases occur largely in children. Of the 281 decedents from those causes, in 1901, 169 were under five years of age, and 14 were from five to ten years of age.

The following Table will present the statistics of mortality from diseases of the brain, for thirty-six years :

TABLE LXV.

Mortality in the State from Brain Diseases, with the Percentage, Sex, Parentage, and Locality, for thirty-six years, from 1866 to 1901, inclusive.

YEARS.	Number of Deaths from Brain Diseases.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	465	3.02	249	216	274	191	21	24	34	139	232	25
1871-1875.....	607	2.95	331	276	358	249	12	32	39	167	337	20
1876.....	150	3.64	92	58	89	61	3	11	7	39	85	5
1877.....	160	3.59	88	72	91	69	3	7	11	49	85	5
1878.....	142	3.19	75	67	76	66	1	13	12	45	68	3
1879.....	163	3.65	82	81	88	75	3	13	15	51	75	6
1880.....	164	3.39	87	77	89	75	3	6	12	56	81	6
1876-1880.....	779	3.49	424	355	433	346	13	50	57	240	394	25
1881.....	186	3.69	103	83	85	101	7	11	14	58	91	5
1882.....	181	3.50	93	88	92	89	4	10	10	71	80	6
1883.....	187	3.54	96	91	100	87	8	14	15	52	94	4
1884.....	148	2.88	90	58	77	71	4	9	8	41	83	3
1885.....	189	2.51	98	91	94	95	2	11	20	53	100	3
1881-1885.....	891	3.44	480	411	448	443	25	55	67	275	448	21
1886.....	182	3.09	108	74	84	98	4	14	13	69	78	4
1887.....	203	3.21	120	83	103	100	8	9	14	75	95	2
1888.....	212	3.21	114	98	109	103	4	19	12	76	90	11
1889.....	189	3.58	91	98	96	93	5	12	17	72	78	5
1890.....	217	3.13	113	104	119	98	7	13	17	90	85	5
1886-1890.....	1,003	3.14	546	457	511	492	28	67	73	382	426	27
1891.....	222	3.36	135	87	108	114	8	19	19	93	78	5
1892.....	246	3.33	130	116	122	124	8	22	27	96	83	10
1893.....	257	3.46	139	118	116	141	12	17	23	100	98	7
1894.....	221	3.09	122	99	93	128	4	24	13	82	84	14
1895.....	258	3.42	123	135	126	132	14	25	22	81	105	11
1891-1895.....	1,204	3.33	649	555	565	639	46	107	104	452	448	47
1896.....	299	3.98	152	147	136	163	10	24	38	139	79	9
1897.....	328	4.61	179	149	151	177	7	26	30	178	78	9
1898.....	327	4.73	176	151	131	196	5	26	26	157	100	13
1899.....	267	3.58	143	124	117	150	8	16	20	143	77	3
1900.....	290	3.29	161	129	126	164	3	26	34	151	69	7
1896-1900.....	1,511	4.00	811	700	661	850	33	118	148	768	403	41
1901.....	281	3.52	143	138	103	178	7	25	29	127	90	3
Total, 36 years....	6,741	3.04	3,633	3,108	3,353	3,388	185	478	551	2,550	2,768	209

* Exclusive of Providence city.

BRONCHITIS.

The number of decedents, in 1901, whose deaths were reported as having been caused by bronchitis, was 232. This is 63 less than in 1900.

This number represents 2.91 per cent. of *all causes*, and a proportion of .53 to every one thousand of the *population*.

Of the 232 decedents, 111 were males and 121 were females; or at the rate of 92 males to each 100 females.

In relation to parentage, 88 were of native and 144 of foreign parentage.

In regard to age, 124 of the decedents were under 5 years of age, 2 were between 5 and 20 years, 7 between 20 and 40 years, 10 between 40 and 60 years; and of the remaining 89 decedents, above 60 years of age, there were 59 deaths from chronic bronchitis.

During the first four months of the year the decedents from bronchitis numbered 127, during the last four months the number was 77.

The very large increase in the proportionate mortality from bronchitis, during the last twenty years, will scarcely fail to be noticed in Table LXVI.

The following Table will show various facts in relation to the mortality from bronchitis, for thirty-six years:

TABLE LXVI.

Mortality in the State from Bronchitis, thirty-six years, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	99	.64	43	56	47	52	1	4	7	29	56	2
1871.....	24	.78	10	14	11	13	.....	1	1	5	17	....
1872.....	25	.65	10	15	11	14	1	1	1	6	16	....
1873.....	27	.64	12	15	11	16	.....	.....	1	7	18	1
1874.....	39	.96	22	17	12	27	.....	.....	.....	6	32	1
1875.....	57	1.39	32	25	29	28	.....	.....	1	21	33	2
1871-1875.....	172	.84	86	86	74	98	1	2	4	45	116	4
1876.....	57	1.46	23	34	26	31	.....	2	.....	7	46	2
1877.....	69	1.62	32	37	35	34	1	1	1	22	44	....
1878.....	80	1.89	30	50	37	43	1	2	6	22	48	1
1879.....	62	1.47	31	31	31	31	1	1	5	21	34	....
1880.....	91	1.86	49	42	44	47	1	6	6	21	56	1
1876-1880.....	359	1.61	165	194	173	186	4	12	18	93	228	4
1881.....	84	.67	48	36	39	45	1	1	2	25	53	2
1882.....	100	1.27	39	61	47	53	3	2	6	25	60	4
1883.....	111	2.10	56	55	51	60	5	2	3	42	57	2
1884.....	118	2.29	58	60	40	78	6	.....	8	42	62	....
1885.....	168	3.08	82	86	91	77	5	3	13	71	76	....
1881-1885.....	581	2.24	283	298	268	313	20	8	32	205	308	8
1886.....	174	2.96	75	99	81	93	3	4	9	74	88	1
1887.....	176	2.77	90	86	60	116	3	6	19	63	84	1
1888.....	228	3.45	105	123	79	149	3	4	17	110	88	6
1889.....	260	4.20	128	132	90	170	4	8	18	109	110	11
1890.....	275	4.01	140	135	116	159	5	4	15	107	138	6
1886-1890.....	1,113	3.48	538	575	426	687	18	26	78	463	503	25
1891.....	247	3.74	108	139	95	152	13	15	21	85	111	2
1892.....	308	4.10	147	161	117	191	5	15	21	130	130	7
1893.....	315	4.24	164	151	105	210	4	9	21	150	126	5
1894.....	254	3.55	112	142	82	172	4	15	11	98	120	6
1895.....	274	3.64	123	141	92	182	8	15	19	103	122	7
1891-1895.....	1,398	3.87	664	734	491	907	34	69	93	566	609	27
1896.....	276	3.68	143	133	101	175	8	19	9	112	116	12
1897.....	226	3.18	123	103	83	143	6	19	13	88	94	6
1898.....	236	3.42	109	127	76	160	6	14	11	87	103	15
1899.....	241	3.23	118	123	73	168	7	16	10	96	103	9
1900.....	295	3.34	143	152	116	179	6	30	22	101	127	9
1896-1900.....	1,274	3.37	636	638	449	825	33	98	65	484	543	51
1901.....	232	2.91	111	121	88	144	.....	16	7	94	100	15
Total, 36 years....	5,228	2.63	2,526	2,702	2,016	3,212	111	235	304	1,979	2,463	136

* Exclusive of Providence city.

CANCER.

There were 306 decedents, in 1901, whose deaths were caused by cancer, according to the returns. The term cancer includes all the various kinds, and in whatever place located.

This number represents 3.84 per cent. of *all causes*, and a proportion of .70 to every one thousand of the *population*.

The varieties of cancer, as reported, may be found in Tables VII and VIII, on pages 22, 23, 35, 36, and 37. They are classed in Table IX as follows: cancer of the buccal cavity, 4; cancer of the stomach and liver, 109; cancer of the peritoneum, intestines, and rectum, 36; cancer of the female genital organs, 59; cancer of the breast, 43; cancer of the skin, 18; cancer of other organs and organs not specified, 37.

In 1901, the deaths from cancer, in the several divisions of the year, were as follows:

First Quarter.....	79	Third Quarter.....	82
Second Quarter.....	75	Fourth Quarter.....	70
	<hr/>		<hr/>
First half.....	154	Second half.....	152
<hr/>			
Whole year.....	306		

Sex.—Of the 306 decedents from cancer, 97 were males and 209 were females; or 32 males and 68 females in every 100.

Parentage.—There were 145 of native parentage and 161 of foreign.

The following Table will show the facts of mortality from cancer, in relation to sex, parentage, and locality, for thirty-six years:

TABLE LXVII.

Mortality in the State from Cancer, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870..	328	2.13	98	230	269	59	19	33	38	87	131	20
1871.....	66	2.13	25	41	47	19	.....	7	5	25	25	4
1872.....	95	2.46	26	69	66	29	4	7	9	21	50	4
1873.....	106	2.53	45	61	76	30	4	6	12	32	44	8
1874.....	87	2.13	23	64	67	20	4	6	12	24	38	3
1875.....	95	2.31	24	71	62	33	3	6	7	25	49	5
1871-1875.....	449	2.18	143	306	318	131	15	32	45	127	206	24
1876.....	106	2.72	27	79	72	34	5	6	8	27	53	7
1877.....	135	3.17	29	106	87	48	3	7	9	37	66	13
1878.....	119	2.82	38	81	79	40	5	11	8	37	48	10
1879.....	125	2.96	39	86	70	55	9	6	9	28	66	7
1880.....	125	2.72	45	80	73	52	5	10	12	26	68	4
1876-1880.....	610	2.73	178	432	381	229	27	40	46	155	301	41
1881.....	145	2.90	40	105	90	55	8	10	12	42	65	8
1882.....	132	2.75	40	92	82	50	5	15	9	43	52	8
1883.....	169	3.20	51	118	105	64	3	17	12	49	86	2
1884.....	156	3.05	39	117	88	68	2	18	21	41	70	4
1885.....	193	3.59	52	141	114	79	8	9	8	67	88	13
1881-1885.....	795	3.07	222	573	479	316	26	69	62	242	361	35
1886.....	162	2.77	42	120	75	87	6	11	9	37	87	12
1887.....	159	2.50	49	110	96	63	8	5	10	49	80	7
1888.....	193	2.93	67	126	128	65	9	10	12	57	88	17
1889.....	189	3.03	65	124	104	85	4	10	13	57	82	23
1890.....	165	2.41	56	109	92	73	14	10	13	46	74	8
1886-1890.....	868	2.71	279	589	495	373	41	46	57	246	411	67
1891.....	177	2.67	48	129	104	73	8	11	15	46	83	14
1892.....	181	2.45	53	128	103	78	7	16	16	57	75	10
1893.....	205	2.75	54	151	124	81	6	15	17	56	92	19
1894.....	214	2.99	67	147	121	93	13	11	23	75	73	19
1895.....	234	3.11	74	160	106	128	13	12	17	79	96	17
1891-1895.....	1,011	2.79	296	715	558	453	47	65	88	313	419	79
1896.....	226	3.01	61	165	117	109	6	21	12	81	89	17
1897.....	254	3.57	77	177	128	126	12	14	22	86	103	17
1898.....	279	4.04	83	196	159	120	18	18	24	75	119	25
1899.....	292	3.92	95	197	135	157	11	16	29	83	132	21
1900.....	292	3.31	96	196	144	148	18	19	15	87	132	21
1896-1900.....	1,343	3.55	412	931	683	660	65	88	102	412	575	101
1901.....	306	3.84	97	209	145	161	6	13	35	90	142	20
Total, 36 years....	5,710	2.88	1,725	3,985	3,328	2,382	246	386	473	1,672	2,546	387

* Exclusive of Providence city.

CHILD-BIRTH.

Under the head of "Child-birth" are included, in this connection, whatever causes of death that may have occurred as the direct result of child-birth, or parturition.

The number reported in 1901 was 95, of which 33 were from the immediate effects of child-birth, including hemorrhage, rupture of uterus, etc., 10 from peritonitis, 21 from puerperal nephritis and convulsions, and 31 from puerperal fever or septicæmia.

Of the whole number, 38 were of native and 57 of foreign parentage.

This number represents 1.19 per cent. of *all causes*, and a proportion of .22 to every one thousand of the *population*.

There were 4 less deaths from "child-birth" in 1901 than in 1900.

The following Table will present the various relations in regard to the mortality from child-birth, for thirty-six years, 1866-1901:

TABLE LXVIII.

Mortality in the State from Child-Birth, with the Percentage of the Whole Number of Deaths, Parentage, and Locality, for thirty-six years, from 1866 to 1901, inclusive.

YEARS.	Number of Deaths from Child-Birth.	Per cent.	PARENTAGE.		DIVISIONS OF THE STATE.					
			Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	155	1.01	62	93	7	6	16	59	56	11
1871-1875.....	245	1.19	111	134	7	21	12	76	110	19
1876.....	48	1.24	21	27	3	.....	1	18	23	3
1877.....	46	1.09	18	28	4	3	5	17	17	....
1878.....	43	1.01	23	20	2	4	3	9	21	4
1879.....	43	1.02	21	22	1	7	2	6	23	4
1880.....	51	1.11	23	28	4	4	3	10	27	3
1876-1880.....	231	1.04	106	125	14	18	14	60	111	14
1881.....	60	1.28	26	34	1	1	3	22	29	4
1882.....	50	1.03	18	32	.....	5	1	16	27	1
1883.....	58	1.10	26	32	1	5	9	14	27	2
1884.....	47	.91	17	30	.....	3	3	19	18	4
1885.....	47	.87	21	26	.....	3	4	15	24	1
1881-1885.....	262	1.04	108	154	2	17	20	86	125	12
1886.....	41	.70	17	24	.....	4	4	15	17	1
1887.....	53	.71	15	38	.....	5	4	18	26	....
1888.....	51	.77	13	38	.....	3	.....	25	20	3
1889.....	41	.65	14	27	1	5	2	16	13	4
1890.....	41	.58	12	29	3	4	4	10	17	3
1886-1890.....	274	.86	92	182	4	24	18	99	117	12
1891.....	32	.35	8	24	.....	3	.....	8	19	2
1892.....	75	1.01	29	46	1	9	3	24	29	9
1893.....	57	.76	23	34	.....	5	4	15	29	4
1894.....	72	1.01	15	57	.....	8	3	25	32	4
1895.....	55	.73	16	39	.....	3	.....	18	30	4
1891-1895.....	291	.77	91	200	1	28	10	90	139	23
1896.....	50	.67	16	34	.....	2	1	24	17	6
1897.....	57	.80	18	39	2	8	.....	21	22	4
1898.....	71	1.03	22	49	1	6	1	28	32	3
1899.....	55	.74	11	44	1	7	3	15	27	2
1900.....	99	1.12	27	72	2	11	4	31	47	4
1896-1900.....	322	.88	94	228	6	34	9	119	145	19
1901.....	95	1.19	38	57	.....	8	6	36	42	3
Total, 36 years.....	1,885	.95	702	1,183	41	156	105	625	845	113

* Exclusive of Providence city.

CHOLERA INFANTUM.

The number of deaths from cholera infantum, according to the returns for 1901, was 401.

This number represents 5.03 per cent. of deaths from *all causes*, and a proportion of .91 to every one thousand of the *population*.

Of the 401 decedents, 215 were males and 186 were females.

Of parentage, 132 were of native and 269 of foreign parentage; or about 204 of foreign to every 100 of native parentage.

The mortality from cholera infantum, during 1901, was 1.5 per cent. less than during the year 1900.

As may be seen on the following page, the number of decedents from cholera infantum, during the thirty-six years from 1866 to 1901, inclusive, was 12,496.

The proportion to total mortality for the period of thirty-six years was 6.3 per cent.

There were 111 males to every 100 females among the decedents during the thirty-six years; and 164 decedents of foreign parentage to every 100 of native, during the same period.

The following Table shows the whole number of reported deaths from cholera infantum; the sex and parentage of the decedents; and the number in each of the larger divisions of the State, in each of the last thirty-six years:

TABLE LXIX.

Mortality in the State from Cholera Infantum, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870..	745	4.84	403	342	352	393	39	44	46	245	324	47
1871.....	172	4.82	85	87	82	90	14	12	12	59	62	13
1872.....	391	8.71	195	196	167	224	16	16	21	157	151	30
1873.....	285	6.19	148	137	165	120	17	14	16	120	99	19
1874.....	265	5.86	140	125	115	150	4	12	5	84	134	26
1875.....	318	6.97	156	162	155	163	20	16	20	108	136	18
1871-1875.....	1,431	6.97	724	707	684	747	71	70	74	528	582	106
1876.....	250	5.75	131	119	105	145	5	12	29	68	124	12
1877.....	259	5.52	139	120	96	163	12	13	9	96	122	7
1878.....	168	3.58	96	72	73	95	7	14	7	64	71	5
1879.....	161	3.43	88	73	71	90	8	16	21	51	59	6
1880.....	247	5.12	123	124	109	138	13	11	10	93	100	20
1876-1880.....	1,085	4.86	577	508	454	631	45	66	76	372	476	50
1881.....	240	4.54	130	110	102	138	10	22	14	75	102	17
1882.....	325	6.10	173	152	133	192	20	11	19	132	130	13
1883.....	242	4.37	124	118	104	138	12	7	22	88	108	5
1884.....	325	6.00	177	148	139	186	10	12	26	114	144	19
1885.....	279	4.92	150	129	128	151	5	23	16	133	86	16
1881-1885.....	1,411	5.45	754	657	606	805	57	75	97	542	570	70
1886.....	377	6.14	179	198	143	234	4	29	15	194	120	15
1887.....	355	5.36	200	155	145	210	16	16	35	160	119	9
1888.....	467	6.78	239	228	184	283	18	35	28	219	149	18
1889.....	396	6.01	209	187	132	264	18	32	20	199	116	11
1890.....	582	8.01	282	300	202	380	19	57	33	245	209	19
1886-1890.....	2,177	6.81	1,109	1,068	806	1,371	75	169	131	1,017	713	72
1891.....	546	8.25	298	248	170	376	21	68	50	255	187	16
1892.....	633	8.56	336	297	210	423	18	77	43	281	201	13
1893.....	603	8.10	324	279	186	417	11	82	44	267	183	16
1894.....	496	6.93	243	253	162	334	13	76	25	225	130	27
1895.....	500	6.64	268	232	155	345	14	57	19	241	150	19
1891-1895.....	2,778	7.55	1,469	1,309	883	1,895	77	360	181	1,209	801	90
1896.....	545	7.26	313	232	165	380	5	62	38	277	148	15
1897.....	425	5.98	204	221	160	265	12	63	30	179	120	21
1898.....	468	6.78	240	228	163	305	14	62	28	211	144	9
1899.....	473	6.34	265	208	127	346	32	48	23	220	139	11
1900.....	557	6.54	311	246	207	350	19	60	47	281	125	25
1896-1900.....	2,468	6.53	1,333	1,135	822	1,646	82	295	166	1,168	676	81
1901.....	401	5.03	215	186	132	269	6	38	20	187	146	4
Total, 36 years....	12,496	6.30	6,584	5,912	4,739	7,757	452	1,117	791	5,328	4,288	520

* Exclusive of Providence city.

CONSUMPTION.

The decedents from consumption, during 1901, numbered 990. The number is 3 more than in the preceding year.

This number represents 12.43 per cent. of *all causes*, and a proportion of 2.26 to every one thousand of the *population*.

Sex.—Of these 990 decedents, 524 were males and 466 were females; being about 89 female decedents to every 100 male decedents.

For the period of twenty years (1866–1885) there were nearly 124 females to every 100 male decedents from consumption, and a very considerable excess every year since, excepting in 1891, 1893, 1897, 1898, and 1901.

Parentage.—There were 299 decedents of native parentage and 691 of foreign; a proportion of 231 of foreign parentage to every 100 of native.

Season.—The largest number of deaths, 107, occurred in March; the next largest, 97, in May; the smallest, 71, in both August and September.

The number in each quarter of the year was as follows:

First Quarter.....	265	Third Quarter....	216
Second Quarter.....	262	Fourth Quarter.....	247
	—		—
First half.....	527	Second half.....	463
Whole year.....	990		

Ages.—During 1901, of the 990 decedents from consumption, 276, or more than one-quarter, were between the ages of 20 and 30; and 204, or more than one-fifth, were between the ages of 30 and 40.

In order to show more concisely the relation of age to mortality from consumption, during 1901, the following age periods and numbers are presented:

Under 10 years of age.....	131
Between 10 and 20 years.....	99
Between 20 and 30 years.....	276
Between 30 and 40 years.....	204
Between 40 and 50 years.....	117
Between 50 and 70 years.....	133
Over 70 years.....	30
Not stated.....	—
Total.....	990

The following Table shows the total deaths from all reported *known causes*, with the *number* and *percentage* of deaths from consumption of the same, in each of the large divisions of the State, and in the whole State, *in each of the last eighteen years*, and also the aggregate for a period of forty-one years, from 1861 to 1901, inclusive :

CONSUMPTION.

STATISTICS BY COUNTIES.

NUMBER AND PERCENTAGE.

FORTY YEARS.

TABLE LXX.—CONSUMPTION.—Number, Locality, and Percentage.

LOCALITY.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	Total 40 years, 1861-1900.	
BRISTOL COUNTY.																				
Total deaths, stated causes.	199	185	221	217	251	208	253	239	232	227	200	256	220	230	212	249	296	239	7,578	
Consumption.....	21	12	23	20	28	20	31	17	29	18	10	29	27	13	29	24	30	25	872	
Percentage.....	10.50	6.48	10.35	9.22	11.15	9.62	11.85	7.11	12.50	7.93	5.00	11.33	12.27	5.65	13.68	9.64	10.14	10.46	11.51	
KENT COUNTY.																				
Total deaths, stated causes.	268	355	385	343	408	454	470	500	598	572	574	521	578	535	513	572	706	598	13,820	
Consumption.....	37	45	43	34	55	45	38	47	51	55	46	54	59	55	54	70	46	55	1,837	
Percentage.....	13.43	12.70	11.20	9.91	13.44	9.84	8.08	9.40	8.53	9.62	8.01	10.36	10.21	10.28	10.53	12.24	6.52	9.20	13.29	
NEWPORT COUNTY.																				
Total deaths, stated causes.	403	408	433	435	458	440	470	597	590	506	516	487	532	507	491	561	608	544	15,438	
Consumption.....	43	47	57	41	32	37	51	51	45	35	46	59	66	55	60	50	52	55	1,819	
Percentage.....	10.67	11.52	13.16	9.19	7.00	8.41	10.85	8.51	7.63	6.92	8.91	12.11	12.41	10.85	12.32	8.91	8.55	10.11	8.49	
PROVIDENCE COUNTY.*																				
Total deaths, stated causes.	1,723	1,918	2,087	2,345	2,465	2,286	2,374	2,344	2,632	2,634	2,536	2,796	2,826	2,646	2,381	2,543	3,080	2,726	65,664	
Consumption.....	248	273	276	246	273	257	305	236	265	259	242	271	292	283	307	337	333	337	8,949	
Percentage.....	14.13	14.20	13.05	10.49	11.07	11.24	12.84	10.00	10.07	9.83	9.54	9.33	10.33	10.70	12.89	13.25	10.81	12.36	13.63	

TABLE LXX.—CONSUMPTION.—Number, Locality, and Percentage.—Concluded.

LOCALITY.	1884, 1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	Total 40 years, 1861-1900.
PROVIDENCE CITY.																		
Total deaths, stated causes.	2,227	2,157	2,341	2,630	2,644	2,495	2,859	2,615	2,950	3,127	2,878	3,055	2,938	2,796	2,921	3,153	3,665	81,560
Consumption.....	344	348	368	323	362	315	394	347	342	328	325	394	367	341	405	452	486	11,877
Percentage.....	15.43	16.10	15.65	12.23	13.66	12.55	13.69	13.19	11.59	10.49	11.29	12.90	12.49	12.20	13.86	14.34	13.26	14.56
WASHINGTON COUNTY.																		
Total deaths, stated causes.	279	307	331	351	368	337	316	307	366	306	401	368	381	371	367	358	435	11,065
Consumption.....	46	56	59	46	50	53	33	27	42	27	36	32	35	30	31	39	40	1,635
Percentage.....	16.28	17.93	17.52	13.10	13.58	15.68	10.38	13.61	7.38	8.82	8.98	8.70	9.19	8.09	8.45	10.90	9.20	14.78
WHOLE STATE.																		
Total deaths, stated causes.	5,099	5,330	5,798	6,321	6,594	6,220	6,891	6,586	7,368	7,372	7,105	7,483	7,475	7,085	6,885	7,436	8,790	195,125
Consumption.....	739	781	826	710	800	727	822	740	759	722	705	839	846	777	886	972	987	26,989
Percentage.....	14.34	14.42	14.12	11.10	12.13	11.61	12.29	11.18	10.30	9.79	9.92	11.21	11.32	10.97	12.87	13.07	11.23	13.83

* Exclusive of Providence city.

TABLE LXXI.

Mortality in the State from Consumption, with the Percentage of the Whole Number of Deaths, from all causes, and the Sex, Parentage, and Locality, in the Aggregate of Different Periods, 1866-1901.

YEARS.	Total Deaths from Consumption.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870	2,718	17.66	1,244	1,474	1,567	1,151	122	231	219	891	1,051	204
1871-1875.....	2,883	14.03	1,267	1,616	1,504	1,379	94	213	163	953	1,234	226
1876-1880.....	3,271	14.66	1,435	1,836	1,473	1,798	104	194	188	1,048	1,498	239
1881-1885.....	3,729	14.40	1,692	2,037	1,427	2,302	113	208	242	1,222	1,751	193
1886.....	826	14.12	382	444	308	518	23	43	57	276	368	59
1887.....	710	11.19	312	398	266	444	20	34	41	246	323	46
1888.....	800	12.13	391	409	284	516	28	55	32	273	362	50
1889.....	727	11.61	356	371	239	488	20	45	37	267	315	53
1890.....	852	12.29	422	430	280	572	31	38	51	305	394	33
1886-1890.....	3,915	12.24	1,863	2,052	1,377	2,538	122	215	218	1,357	1,762	241
1891.....	740	11.18	380	360	248	492	17	47	51	236	347	42
1892.....	759	10.26	360	399	249	510	29	51	45	265	342	27
1893.....	722	9.72	364	358	230	492	18	55	35	259	328	27
1894.....	705	9.85	337	368	214	491	10	46	46	242	325	36
1895.....	839	11.13	392	447	284	555	29	54	59	271	394	32
1891-1895.....	3,765	10.41	1,833	1,932	1,225	2,540	103	253	236	1,273	1,736	174
1896.....	846	11.27	409	437	273	573	27	59	66	292	367	35
1897.....	777	10.93	395	382	269	508	13	55	55	283	341	30
1898.....	886	12.83	460	426	272	614	29	54	60	307	405	31
1899.....	972	13.03	478	494	316	656	24	70	50	337	452	39
1900.....	987	11.19	514	473	324	663	30	46	52	333	486	40
1896-1900.....	4,468	11.82	2,256	2,212	1,454	3,014	123	284	283	1,552	2,051	175
1901.....	990	12.43	524	466	299	691	25	55	55	337	474	44
Total, 36 years...	25,739	13.00	12,114	13,625	10,326	15,413	806	1,653	1,604	8,633	11,557	1,486

* Exclusive of Providence city.

CONSUMPTION. *Proportion of Deaths to Population.*

The proportion of deaths from consumption to the *population* in the different localities of the State, during the last sixteen years, may be seen in the following summaries :

For five years, 1886 to 1890, inclusive.

	Persons, One Death to every	In every 1,000 of Population.
Bristol County.....	494	or .....2.09
Kent County.....	569	or .....1.85
Newport County.....	708	or .....1.48
Providence County*.....	598	or .....1.91
Providence City.....	356	or .....2.82
Washington County.....	497	or .....2.10
Whole State.....	420	or .....2.40

For five years, 1891 to 1895, inclusive.

	Persons, One Death to every	In every 1,000 of Population.
Bristol County.....	671	or .....1.74
Kent County.....	577	or .....1.73
Newport County.....	647	or .....1.58
Providence County*.....	537	or .....1.91
Providence City.....	413	or .....2.57
Washington County.....	766	or .....1.34
Whole State.....	497	or .....2.02

For five years, 1896 to 1900, inclusive.

	Persons, One Death to every	In every 1,000 of Population.
Bristol County.....	538	or .....1.86
Kent County.....	564	or .....1.77
Newport County.....	562	or .....1.78
Providence County*.....	487	or .....2.05
Providence City.....	388	or .....2.58
Washington County.....	716	or .....1.39
Whole State.....	462	or .....2.17

* Exclusive of Providence city.

1899.

	Persons, One Death to every	In every 1,000 of Population.
Bristol County.....	595.....or.....	1.68
Kent County.....	487.....or.....	2.05
Newport County.....	1,215.....or.....	0.82
Newport City.....	529.....or.....	1.89
Providence County Towns.....	450.....or.....	2.19
Central Falls.....	664.....or.....	1.50
Pawtucket.....	422.....or.....	2.37
Providence City.....	367.....or.....	2.73
Woonsocket.....	386.....or.....	2.59
Washington County.....	681.....or.....	1.52
Whole State.....	435.....or.....	2.30

1900.

	Persons, One Death to every	In every 1,000 of Population.
Bristol County.....	438.....or.....	2.28
Kent County.....	652.....or.....	1.54
Newport County.....	1,509.....or.....	0.66
Newport City.....	490.....or.....	2.04
Providence County Towns.....	414.....or.....	2.42
Central Falls.....	673.....or.....	1.49
Pawtucket.....	503.....or.....	1.99
Providence City.....	361.....or.....	2.77
Woonsocket.....	434.....or.....	2.30
Washington County.....	604.....or.....	1.66
Whole State.....	434.....or.....	2.30

1901.

	Persons, One Death to every	In every 1,000 of Population.
Bristol County.....	536.....or.....	1.86
Kent County.....	554.....or.....	1.80
Newport County.....	1,080.....or.....	0.92
Newport City.....	498.....or.....	2.01
Providence County Towns.....	434.....or.....	2.30
Central Falls.....	422.....or.....	2.37
Pawtucket.....	532.....or.....	1.88
Providence City.....	380.....or.....	2.63
Woonsocket.....	482.....or.....	2.07
Washington County.....	553.....or.....	1.81
Whole State.....	442.....or.....	2.26

There was an increase in the mortality from consumption, in 1901, as compared with the preceding year, in numbers, but not in proportion to the population.

CROUP.

There were 24 decedents from croup, in 1901, as against 18 in 1900.

Sex.—Of the 24 decedents from croup, in 1901, there were 11 males and 13 females.

Parentage.—There were 7 decedents of native and 17 of foreign parentage.

Age.—There were 21 of the decedents under 5 years of age, and 3 of five years and under 10.

Season.—

First Quarter.....	8	Third Quarter.....	2
Second Quarter.....	5	Fourth Quarter.....	9
	—		—
First half.....	13	Second half.....	11
Whole year.....		24	

The following Table will exhibit various facts in relation to mortality from croup for thirty-six years :

TABLE LXXII.

Mortality in the State from Croup, from 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	227	1.47	112	115	96	131	6	13	19	82	99	8
1871-1875.....	367	1.79	198	169	164	203	13	30	13	131	169	11
1876.....	102	2.61	50	52	42	60	1	6	.....	26	65	4
1877.....	95	2.23	48	47	34	61	4	3	1	47	40	.....
1878.....	93	2.20	45	48	43	50	14	3	7	25	39	5
1879.....	96	2.28	58	38	40	56	3	6	15	25	43	4
1880.....	66	1.45	32	34	27	39	3	3	4	20	30	6
1876-1880.....	452	2.03	233	219	186	266	25	21	27	143	217	19
1881.....	101	2.16	45	56	38	63	2	6	4	38	49	2
1882.....	77	1.60	41	36	32	45	1	2	6	33	32	3
1883.....	71	1.40	32	39	33	38	1	6	4	25	35	.....
1884.....	80	1.55	40	40	32	48	2	11	4	29	34	.....
1885.....	94	1.74	45	49	42	52	4	8	6	46	28	2
1881-1885.....	423	1.63	203	220	177	246	10	33	24	171	178	7
1886.....	90	1.53	45	45	39	51	2	18	12	24	32	2
1887.....	113	1.79	58	55	43	70	9	12	4	43	39	6
1888.....	79	1.19	43	36	34	45	4	2	7	34	27	5
1889.....	80	1.28	37	43	24	56	3	15	1	27	33	1
1890.....	83	1.19	53	30	28	55	2	14	2	32	31	2
1886-1890.....	445	1.39	236	209	168	277	20	61	26	160	162	16
1891.....	67	1.46	40	27	17	50	1	11	11	27	16	1
1892.....	89	1.20	52	37	44	45	1	10	21	21	33	3
1893.....	50	.67	29	21	13	37	4	11	3	25	7	.....
1894.....	32	.45	16	16	10	22	1	7	2	15	7	.....
1895.....	30	.40	14	16	9	21	.....	6	4	11	9	.....
1891-1895.....	268	.84	151	117	93	175	7	45	41	99	72	4
1896.....	24	.32	16	8	5	19	.....	4	.....	12	8	.....
1897.....	17	.24	11	6	4	13	.....	8	.....	5	4	.....
1898.....	9	.13	4	5	3	6	.....	2	.....	4	2	1
1899.....	11	.15	3	8	4	7	.....	.....	2	5	4	.....
1900.....	18	.30	9	9	6	12	.....	4	.....	4	9	1
1896-1900.....	79	.21	43	36	22	57	.....	18	2	30	27	2
1901.....	24	.30	11	13	7	17	1	8	.....	8	6	1
Total, 36 years....	2,285	1.15	1,187	1,098	913	1,372	82	229	152	824	930	68

* Exclusive of Providence city.

DIARRHOEA AND DYSENTERY.

There were 96 decedents from diarrhoea and dysentery, in 1901.

This number represents 1.2 per cent. of all causes, and a proportion of .22 to every 1,000 of the population.

Sex.—Of the 96, 43 were males and 53 were females, or a proportion of 81 males to every 100 females.

Parentage.—There were, of the 96 decedents, 35 of native parentage and 61 of foreign parentage, or a proportion of about 174 of foreign parentage to every 100 of native.

Age.—There were 34 of the decedents from diarrhoea and dysentery under 5 years of age, and there were 50 over 50 years of age, leaving 12 for all the 45 years between 5 and 50.

Locality.—Of the 96 decedents, 74 were in Providence county; 10 in Kent county; 8 were reported from Bristol county; 2 from Newport county; and 2 from Washington county.

Season.—Seventy-five of the deaths from diarrhoea and dysentery occurred during the months of July, August, September, and October.

The following Table will show the deaths from diarrhoea and dysentery, with the percentage, sex, parentage, etc., for each of 36 years, beginning with 1860 :

TABLE LXXIII.

Mortality in the State from Diarrhœa and Dysentery, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870..	677	4.40	353	324	323	354	26	46	89	215	254	47
1871-1875.....	580	2.60	317	263	305	275	27	46	23	183	289	12
1876.....	122	2.96	66	56	52	70	3	6	2	41	65	5
1877.....	142	3.19	64	78	73	69	8	6	9	54	55	10
1878.....	93	2.09	42	51	51	42	5	8	2	34	39	5
1879.....	97	2.17	48	49	47	50	9	6	10	27	42	3
1880.....	98	2.03	49	49	50	48	4	6	10	32	42	4
1876-1880.....	552	2.47	269	283	273	279	29	32	33	188	243	27
1881.....	119	2.37	56	63	54	65	2	4	3	47	57	6
1882.....	158	3.11	75	83	69	89	2	4	28	57	64	3
1883.....	182	3.45	86	96	88	94	7	7	16	74	75	3
1884.....	153	2.98	74	79	69	84	10	5	11	66	56	5
1885.....	120	2.23	61	59	51	69	7	6	6	62	35	4
1881-1885.....	732	2.89	352	380	331	401	28	26	64	306	287	21
1886.....	159	2.72	64	95	70	89	7	11	1	73	59	8
1887.....	199	3.11	107	92	70	129	6	16	4	92	72	9
1888.....	157	2.31	69	88	97	60	6	8	3	54	71	15
1889.....	159	2.54	73	86	67	92	1	12	17	71	50	8
1890.....	182	2.62	84	98	74	108	5	9	22	77	63	6
1886-1890.....	856	2.68	397	459	378	478	25	56	47	367	315	46
1891.....	143	2.16	69	74	51	92	4	15	13	48	58	5
1892.....	199	2.69	100	99	82	117	6	14	8	76	89	6
1893.....	159	2.14	79	80	56	103	5	14	7	60	66	7
1894.....	124	1.73	61	63	36	88	.....	8	4	59	43	10
1895.....	101	1.34	38	63	40	61	6	9	3	41	37	5
1891-1895.....	726	2.01	347	379	265	461	21	60	35	284	293	33
1896.....	89	1.18	49	40	40	49	2	5	8	39	28	7
1897.....	107	1.50	48	59	37	70	1	14	7	41	36	8
1898.....	98	1.42	53	45	33	65	2	14	5	32	40	5
1899.....	111	1.47	49	62	34	77	.....	9	11	55	32	4
1900.....	112	1.27	49	63	48	64	6	18	8	40	31	9
1896-1900.....	517	1.37	248	269	192	325	11	60	39	207	167	33
1901.....	96	1.20	43	53	35	61	8	10	2	25	49	2
Total, 36 years....	4,736	2.39	2,326	2,410	2,102	2,634	175	336	332	1,775	1,897	221

* Exclusive of Providence city.

DIPHTHERIA.

The number of deaths from diphtheria, in 1901, was 177, which was 13 less than in 1900.

This number represents 2.2 per cent. of all causes, or a proportion of .40 to every one thousand of the population.

Sex.—Of the 177 decedents, 92 were males and 85 were females.

Parentage.—There were 67 of native and 110 of foreign parentage, or a proportion of about 164 of foreign parentage to every 100 of native.

Season.—There were 59 deaths from diphtheria in the first quarter, 33 the second quarter, 30 in the third quarter, and 55 in the fourth quarter.

Age.—There were 120 deaths under 5 years of age, 43 between 5 and 10, 5 between 10 and 15, 2 between 15 and 20, and 7 above 20 years of age.

Locality.—Of the 177 decedents, 150 were in Providence county, 2 in Bristol county, 13 in Kent county, 10 in Newport county, and 2 in Washington county.

The following Table shows the mortality in the State from diphtheria for thirty-six years, beginning with 1866, also the percentage of deaths, the sex, parentage, etc.:

TABLE LXXIV.

Mortality in the State from Diphtheria, 1866 to 1901.

YEARS.	Whole Number of Deaths, all causes.	Number of Deaths from Diphtheria.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
				Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870...	15,391	181	1.18	83	98	103	78	5	28	30	40	44	34
1871-1875...	20,540	242	1.18	118	124	151	88	4	35	20	54	105	24
1876.....	4,116	159	3.86	77	82	69	90	1	2	9	29	111	7
1877....	4,450	492	11.56	239	253	233	259	12	44	2	122	295	17
1878.....	4,441	435	9.80	224	211	201	234	21	29	23	106	245	11
1879.....	4,472	259	5.79	121	138	143	116	7	19	20	95	106	12
1880.....	4,829	152	3.40	73	79	75	77	3	6	2	63	61	17
1876-1880...	22,308	1,497	6.71	734	763	721	776	44	100	56	415	818	64
1881.....	5,016	216	4.63	106	110	118	98	10	16	8	53	116	13
1882.....	5,074	101	1.99	48	53	55	46	.....	3	4	29	48	17
1883.....	5,282	95	1.88	39	56	45	50	1	7	3	26	54	4
1884.....	5,141	119	2.31	65	54	47	72	8	1	9	39	58	4
1885.....	5,389	99	1.83	47	52	48	51	5	5	6	39	37	7
1881-1885...	25,902	630	2.43	305	325	313	317	24	32	30	186	313	45
1886.....	5,849	228	3.90	98	130	101	127	20	21	23	64	98	2
1887.....	6,340	287	4.53	135	152	101	186	15	11	4	114	108	35
1888.....	6,594	191	2.86	87	104	79	112	13	3	9	58	98	10
1889....	6,259	184	2.93	80	104	89	95	3	10	11	56	97	7
1890.....	6,934	211	3.04	112	99	93	118	1	9	16	86	94	5
1886-1890...	31,976	1,101*	3.44	512	589	463	638	52	54	63	378	495	59
1891.....	6,620	102	1.50	52	50	48	54	2	7	6	40	47	....
1892.....	7,396	89	1.20	48	41	44	45	1	1	8	23	39	17
1893.....	7,440	157	2.11	75	82	57	100	1	11	13	67	65	....
1894.....	7,160	133	1.86	74	59	61	72	.....	3	8	72	47	3
1895.....	7,535	340	4.51	166	174	145	195	3	7	6	221	94	9
1891-1895...	36,151	821	2.24	415	406	355	466	7	29	41	423	292	29
1896.....	7,504	283	3.77	149	134	120	163	5	19	6	109	140	4
1897.....	7,110	231	3.25	120	111	84	147	3	19	8	111	86	4
1898.....	6,905	93	1.35	51	42	34	59	.....	12	5	32	40	4
1899.....	7,458	86	1.15	35	51	31	55	1	10	4	28	40	3
1900.....	8,823	190	2.15	106	84	76	114	5	22	15	83	53	12
1896-1900...	37,800	883	2.34	461	422	345	538	14	82	38	363	359	27
1901.....	7,966	177	2.22	92	85	67	110	2	13	10	66	84	2
Total, 36 years.	198,034	5,532	2.79	2,720	2,812	2,521	3,011	152	373	288	1,925	2,510	284

* Exclusive of Providence city.

FEVER, MALARIAL.

The number of deaths, during 1901, from diseases classed as fever malarial, was 23. The number in 1900 was 21; in 1899 was 30; in 1898 was 31; in 1897 was 44; in 1896 was 42; in 1895 was 29; in 1894 was 26; in 1893 was 20; in 1892 was 36; in 1891, 31; in 1890, 42; in 1889, 40; in 1888, 71; in 1887, 85; in 1886, 44; in 1885, 30; 1884, 25.

Sex.—Of the 23 decedents from malarial fevers, in 1901, 11 were males and 12 were females.

Parentage.—There were, of the 23 decedents from malarial diseases, 7 of native parentage and 16 of foreign.

Season.—The deaths from malarial diseases occurred in the different seasons of the year as follows:

First Quarter.....	4	Third Quarter.....	8
Second Quarter.....	5	Fourth Quarter.....	6
First half.....	9	Second half.....	14
Whole year.....		23	

Age.—The number of decedents in the different periods of life was as follows:

Under 5 years of age.....	8
From 5 to 20 years of age.....	9
From 20 to 40 years of age.....	1
From 40 to 60 years of age.....	3
60 and over.....	2
Total.....	23

Localities.—Bristol county, 1; Kent county, 1; Newport county, 2; Providence county, 17; Washington county, 2.

FEVERS, TYPHOID, ETC.

The following Table exhibits, for each of the last thirty-six years, the number and the percentage and the sex and parentage of the decedents from fevers returned as from typhoid, and the number in each division of the State:

TABLE LXXV.

Mortality in the State from Fevers, Typhoid, etc., 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	641	4.2	314	327	398	243	35	39	77	243	184	63
1871-1875.....	740	3.5	350	390	419	321	12	43	34	263	299	89
1876.....	126	3.0	65	61	71	55	5	9	13	44	33	22
1877.....	134	3.0	63	71	65	69	8	10	8	52	44	12
1878.....	150	3.4	68	82	77	73	13	13	6	59	47	12
1879.....	114	2.7	47	67	63	51	4	13	6	44	40	7
1880.....	158	3.4	74	84	94	64	8	12	5	66	52	15
1876-1880.....	682	3.1	317	365	370	312	38	57	38	265	216	68
1881.....	143	2.8	74	69	74	69	4	13	14	58	41	13
1882.....	229	4.7	111	118	100	129	6	11	5	56	145	6
1883.....	258	4.8	146	112	117	141	9	16	10	82	134	7
1884.....	165	3.2	83	82	78	87	7	7	12	66	64	9
1885.....	158	2.9	71	87	70	88	6	14	8	69	53	8
1881-1885.....	953	3.7	485	468	439	514	32	61	49	331	437	43
1886.....	169	2.9	78	91	76	93	6	8	11	66	70	8
1887.....	127	2.0	67	60	58	69	2	14	9	49	38	15
1888.....	235	3.6	125	110	88	147	20	24	14	66	102	9
1889.....	143	2.3	85	58	56	87	2	17	9	46	60	9
1890.....	107	1.5	58	49	39	68	7	8	5	37	43	7
1886-1890.....	781	2.5	413	368	317	464	37	71	48	264	313	48
1891.....	149	2.2	86	63	56	93	5	8	17	46	63	10
1892.....	133	1.8	75	58	55	78	5	12	9	49	51	7
1893.....	115	1.6	65	50	41	74	4	7	5	40	52	7
1894.....	159	2.2	93	66	46	113	5	13	13	56	70	2
1895.....	125	1.7	73	52	55	70	3	7	11	52	48	4
1891-1895.....	681	1.9	392	289	253	428	22	47	55	243	284	30
1896.....	113	1.5	66	47	44	69	6	8	9	39	43	8
1897.....	66	0.9	43	23	33	33	4	4	4	25	23	6
1898.....	76	1.1	49	27	23	53	2	3	11	20	39	1
1899.....	90	1.2	53	37	41	49	3	6	9	24	42	6
1900.....	127	1.4	70	57	51	76	4	6	23	43	39	12
1896-1900.....	472	1.2	281	191	192	280	19	27	56	151	186	33
1901.....	103	1.3	62	41	34	69	7	5	11	28	46	6
Total, 36 years....	5,093	2.6	2,614	2,439	2,422	2,631	202	350	368	1,788	1,965	380

* Exclusive of Providence city.

During 1901, of the 103 decedents from typhoid fever, there were 62 males and 41 females.

During the period of thirty-six years, 1866 to 1901, inclusive, the proportions of the sexes of the decedents from typhoid fever in the State were 93 females to every 100 males.

Parentage.—There were 34 decedents from enteric fever, of native parentage, in 1901, and 69 of foreign parentage.

Season.—

First Quarter.....	22	Third Quarter.....	26
Second Quarter.....	15	Fourth Quarter.....	40
	—		—
First half.....	37	Second half.....	66
Whole year.....	103		

The following Table shows the number of decedents from fevers, in each division of ages, in each of the last thirty-six years, in the State of Rhode Island :

TABLE LXXVI.

Mortality from Typhoid Fever in Age Periods.

YEARS.	PERIODS OF LIFE.									
	Under 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.
1866.....	23	10	21	26	21	16	9	14	10	.....
1867.....	17	6	23	33	12	11	8	4	2	2
1868.....	10	7	10	21	8	8	10	5	5	.....
1869.....	10	8	14	28	9	7	9	8	6	2
1870.....	26	13	31	46	19	25	8	8	8	2
1871.....	13	10	20	28	18	16	9	4	5	2
1872.....	17	18	34	54	20	9	12	11	3	1
1873.....	27	12	34	31	25	13	13	7	8	2
1874.....	10	14	26	32	9	5	10	3	6	2
1875.....	23	14	19	43	18	10	10	6	4	.....
1876.....	21	10	15	24	14	9	6	16	6	3
1877.....	22	13	18	36	20	8	5	7	2	2
1878.....	17	16	27	47	13	11	12	2	3	2
1879.....	19	7	14	26	15	6	3	12	8	3
1880.....	25	12	24	43	23	12	10	5	3	.....
1881.....	25	9	19	29	14	11	9	12	11	4
1882.....	24	22	44	69	27	14	9	10	9	1
1883.....	36	25	46	75	31	12	11	10	8	2
1884.....	24	13	19	47	22	9	12	10	5	3
1885.....	35	12	16	25	26	11	11	12	6	4
1886.....	29	9	25	41	20	14	17	8	5	1
1887.....	24	8	16	31	16	10	5	8	4	4
1888.....	27	27	42	75	29	16	12	3	4	.....
1889.....	18	12	29	41	18	8	9	5	3	.....
1890.....	13	11	13	35	14	5	6	6	4	.....
1891.....	12	10	25	50	26	10	7	6	2	.....
1892.....	10	11	18	42	20	15	10	6	1	.....
1893.....	6	7	16	43	15	10	10	6	2	.....
1894.....	18	8	31	57	21	12	6	3	2	.....
1895.....	10	9	10	56	15	7	9	5	4	.....
1896.....	10	3	18	35	13	16	6	7	5	.....
1897.....	6	4	7	22	11	9	3	3	1	.....
1898.....	8	5	8	23	21	9	1	1	.....	.....
1899.....	17	15	5	19	17	10	2	1	2	1
1900.....	13	9	17	44	23	12	6	2	1	.....
1901.....	8	4	12	25	29	16	5	3	1	.....
Total, 36 years.....	653	403	766	1,402	672	402	300	239	159	43

TABLE LXXVII.

Comparative Exhibit of the Percentage of Deaths from Typhoid Fever to Total Deaths from specified causes, in Six New England States, for twenty-six years, 1876 to 1901.

STATES.	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
RHODE ISLAND.	3.0	3.0	3.4	2.7	3.4	2.8	4.7	4.8	3.2	2.9	2.9	2.0	3.6	2.2	1.5	2.2	1.8	1.6	2.2	1.7	1.5	0.9	1.1	1.2	1.4	1.3
Maine .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.4	2.6	2.5	1.9	1.7	1.3	1.9	1.7	1.7	.....
New Hampshire .....	.....	.....	.....	.....	.....	.....	.....	.....	2.2	2.2	3.0	2.1	2.2	2.4	1.9	2.4	1.3	1.4	1.7	1.4	1.9	1.3	1.2	1.2	1.3	1.0
Vermont	4.2	4.8	3.4	2.7	3.5	5.5	3.4	3.1	3.0	2.2	2.5	2.5	2.2	2.7	1.6	1.6	1.4	2.5	2.0	1.7	1.6	1.3	1.7	1.9	1.9	1.6
Massachusetts...	2.7	2.7	2.3	1.9	2.5	2.9	2.9	2.3	2.4	2.0	2.1	2.3	2.2	2.2	1.9	1.8	1.7	1.5	1.6	1.4	1.5	1.3	1.4	1.3	1.3	1.2
Connecticut	3.6	3.3	2.7	1.8	2.5	2.5	3.1	2.1	2.5	1.1	2.2	1.2	2.2	2.2	2.3	2.3	2.0	1.8	1.8	1.8	1.5	1.1	1.3	1.3	1.8	1.9

DISEASES OF THE HEART.

The number of decedents from the various forms of diseases of the heart, as reported in 1901, was 685. The number is 16 less than that of 1901.

This number represents 8.6 per cent. of all causes, and a proportion of 1.56 to every 1,000 of the population.

Sex.—There were 341 male decedents and 344 female decedents; a proportion of about 99 males to every 100 females.

Parentage.—Of the 685 decedents from diseases of the heart, in 1901, there were 303 of native parentage and 382 of foreign, a proportion of about 79 of native parentage to every 100 of foreign. Except in 1892, 1893, 1896, 1900, and 1901, it has been the invariable rule of the whole period of registration that the native population is more subject to heart disease than the foreign.

The following Table exhibits, for each of the last thirty-six years, 1866 to 1901, inclusive, the number and percentage, and the sex and parentage, of the decedents from diseases of the heart, and the number of the same, in each division of the State:

TABLE LXXVIII.

Mortality from Diseases of the Heart, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	590	3.83	308	282	305	195	22	48	48	184	262	26
1871-1875.....	922	4.49	458	464	505	327	21	46	82	248	465	60
1876.....	166	4.03	86	80	109	57	9	11	10	38	86	12
1877.....	182	4.09	94	88	110	72	3	7	9	57	98	13
1878.....	166	3.73	88	78	100	57	5	11	15	38	83	14
1879.....	202	4.78	114	88	127	75	8	20	16	38	111	9
1880.....	231	5.03	125	106	146	85	9	2	29	59	104	9
1876-1880.....	947	4.25	507	440	601	346	34	70	79	230	477	57
1881.....	264	5.65	131	133	154	110	9	21	24	73	121	16
1882.....	255	5.31	116	139	162	93	8	16	23	55	142	11
1883.....	325	6.20	167	158	179	146	8	27	30	70	172	18
1884.....	285	5.60	135	150	163	122	6	16	25	87	139	12
1885.....	349	6.48	162	187	198	151	13	27	25	94	159	31
1881-1885.....	1,478	5.71	711	767	856	622	44	107	127	379	733	88
1886.....	330	5.20	152	178	184	146	12	20	18	82	168	30
1887.....	406	6.40	205	201	240	166		21	36	123	193	26
1888.....	436	6.56	196	240	240	196	11	22	40	122	210	31
1889.....	460	7.35	233	227	258	202	19	31	39	143	199	29
1890.....	405	5.84	222	183	219	186	15	49	27	114	172	28
1886-1890.....	2,037	6.37	1,008	1,029	1,141	896	64	143	160	584	942	144
1891.....	480	7.25	248	232	244	236	21	37	38	137	210	37
1892.....	506	6.84	260	246	252	254	22	47	48	163	200	26
1893.....	535	7.19	264	271	264	271	20	43	30	174	238	30
1894.....	476	6.65	251	225	246	230	16	32	41	161	192	34
1895.....	535	7.10	260	275	275	260	14	41	54	180	210	36
1891-1895.....	2,532	7.01	1,283	1,249	1,281	1,251	93	200	211	815	1,050	163
1896.....	556	7.41	294	262	266	290	19	40	38	189	231	30
1897.....	570	8.02	305	265	295	275	9	38	42	200	230	51
1898.....	549	7.95	295	254	282	267	17	42	44	171	237	38
1899.....	648	8.68	314	334	334	314	20	56	72	190	267	43
1900.....	701	7.95	319	382	319	382	22	49	57	241	284	48
1896-1900.....	3,024	8.00	1,527	1,497	1,496	1,528	87	225	253	991	1,249	219
1901.....	685	8.60	341	344	303	382	20	46	60	245	273	41
Total, 36 years....	12,215	6.16	6,143	6,072	6,668	5,547	385	885	1,020	3,676	5,451	798

* Not including Providence city.

Sex.—Of the 12,215 persons deceased from diseases of the heart, in the last thirty-six years, 6,143 were males and 6,072 were females; or 101 males to each 100 females.

Parentage.—Of the 12,215 decedents, during thirty-six years, 6,668 were of native parentage and 5,547 of foreign. The proportions would, therefore, stand as follows: To every 100 of foreign parentage there were about 120 of native; or about 54 native and 46 of foreign parentage in every 100 deaths. This difference has been gradually diminishing. In 1901 there were 79 more deaths of foreign than of native parentage, or about 44 of native and 56 of foreign in every 100 deaths.

Diseases of the heart rank third in the order of causes in 1901.

The following Table shows the number of decedents from diseases of the heart, in each divisional period of life, in each of the last thirty-six years:

TABLE LXXIX.

Mortality from Diseases of the Heart, in Age Periods.

YEARS.	PERIODS OF LIFE.								Not stated.
	Under 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	
1866.....	18	8	14	17	10	23	21	4	.....
1867.....	11	11	10	13	22	16	27	4	.....
1868.....	15	5	13	11	14	28	25	5	.....
1869.....	21	4	14	18	20	22	21	7	1
1870.....	19	6	11	13	20	21	23	3	1
1871.....	9	12	10	19	23	36	28	6	1
1872.....	27	12	22	19	31	36	29	13	.....
1873.....	19	11	28	18	25	35	42	9	2
1874.....	20	16	26	21	27	50	40	12	2
1875.....	14	16	25	20	32	29	41	9	.....
1876.....	14	10	15	19	20	38	39	10	1
1877.....	15	11	20	18	27	45	33	13	.....
1878.....	16	8	18	16	26	36	35	11	.....
1879.....	19	9	13	25	33	51	36	16	.....
1880.....	15	10	18	23	38	49	49	28	1
1881.....	32	13	26	33	37	49	53	21	.....
1882.....	22	17	24	25	36	51	61	17	2
1883.....	39	13	21	33	52	65	76	26	.....
1884.....	15	25	21	32	45	61	50	32	4
1885.....	38	13	24	42	61	69	78	24	.....
1886.....	39	18	28	38	52	68	69	18	.....
1887.....	52	30	23	35	61	79	87	39	.....
1888.....	39	25	30	54	84	97	74	33	.....
1889.....	45	25	37	45	69	85	118	35	1
1890.....	34	15	24	53	69	78	96	36	.....
1891.....	40	18	45	41	85	109	101	38	3
1892.....	54	21	32	59	98	111	104	31	1
1893.....	55	27	48	68	81	116	97	42	1
1894.....	40	28	36	64	69	102	102	35	.....
1895.....	33	20	44	57	82	137	111	51	.....
1896.....	40	33	46	65	98	106	117	50	1
1897.....	40	34	43	68	74	145	117	49	.....
1898.....	34	22	31	57	91	134	130	50	.....
1899.....	23	28	37	77	111	153	169	48	2
1900.....	47	32	49	61	130	164	164	52	2
1901.....	40	40	55	65	124	152	139	68	2
Total, 36 years.....	1,053	646	981	1,342	1,972	2,646	2,602	945	28

The results of thirty-six years of registration, with record of ages of decedents from diseases of the heart, show, in periods of twenty years each of life, the following percentages :

Under 20 years of age.....	8.6 per cent.
Between 20 and 40.....	13.3 per cent.
Between 40 and 60.....	27.1 per cent.
Between 60 and 80.....	43.0 per cent.
Over 80.....	7.8 per cent.
Not stated.....	0.2 per cent.
<hr/>	
Total.....	100.0 per cent.

It will be seen that 43 per cent. of all the deaths from diseases of the heart were of persons over sixty years of age, and under eighty.

Diseases of the heart have acquired large importance as a cause of death. From 38.7 in every 1,000 deaths from all causes, in 1866, heart diseases have gradually increased to 86.0 in every 1,000 in 1901.

INFLUENZA.

The event, during the first four months of the year 1890, of a very extraordinary and perhaps unprecedented prevalence of a form of influenza, which was unlike that of ordinary occurrence in that it affected indiscriminately all the functions and nearly all the organs of the body, varying with the individuals attacked, and the re-appearance of the same, although in greatly lessened numbers, in 1891, warrants a continued notice not given previous to 1890 in the Registration reports to the affection so named.

The disease was, in 1890, mostly largely confined to the respiratory passages, and resulted in a largely increased mortality from bronchitis and consumption. During 1891 the disease was equally as severe, affecting in a larger measure the brain and other nerve centres, and the direct mortality was even larger than that of 1890. The prevalence was largest during the second quarter of the year, and again in December.

The increase in December of 1891 was followed by a sudden augmentation in the first four months of the following year, 1892, the greatest number of deaths, 198, occurring in January of 1892. The total for 1892 was 336, or about twice as much as for either of the previous years. In 1893 there were 84 deaths reported as resulting from influenza. This was 251 less than in 1892. In 1894

there were 166 deaths from influenza reported, an increase of 95 per cent. from 1893, and a decrease of over 50 per cent. from 1892. From influenza there were 115 deaths in 1895, in 1896 there were but 42 deaths, in 1897 there were 153 deaths, in 1898 there were 75 deaths, in 1899 there were 219 deaths, in 1900 there were 255 deaths, and in 1901 there were 146 deaths.

Sex.—Of the 146 deaths from influenza, in 1901, 55 were males and 91 were females, a proportion of 60 males to every 100 females.

Parentage.—The parent nativity of the decedents was 79 of native and 67 of foreign.

Season.—Of the 146 deaths from influenza, during 1901, 113 occurred in the first quarter of the year, 25 in the second, 1 in the third, and 7 in the fourth quarter.

Age.—There were 16 under 5 years of age, 5 from 5 to 20 years, 13 from 20 to 40, 24 from 40 to 60, 64 from 60 to 80, 24 from 80 years of age and over.

The following Tables will show the proportionate nativity, sex, and locality of the disease, for the past twelve years.

The greatest mortality appears to be among females, there being 153 females to every 100 males. The parentage appears to be nearly equally divided between native and foreign, there being 102 foreign to 100 native.

The largest number of deaths occurred in Providence city, but this is not out of proportion to the proportionate number and density of population.

Referring to the age periods, it will be seen that the greatest mortality occurred in the period from 70 to 80, there being 420, or 21.68 per cent. of the whole number of deaths from this disease. Taking the three decennials, including 60 to 90, we have 1,007 deaths, or 51.98 per cent. of all by ages.

By season, the greatest number of deaths, 607, occurred in January; the next in number, 326, in February; followed by 295 in April, 254 in March, and 192 in December.

Mortality in the State from Influenza, 1890 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1890.....	168	2.42	72	96	68	100	6	14	12	61	70	5
1891.....	177	2.67	67	110	91	86	7	14	14	60	69	13
1892.....	366	4.54	142	194	170	166	11	27	13	115	144	26
1893.....	85	1.14	34	51	47	38	7	3	5	33	32	5
1894.....	166	2.32	62	104	88	78	6	9	15	48	75	13
1895.....	115	1.53	48	67	63	52	3	10	9	42	41	10
1896.....	42	.56	15	27	16	26	2	1	2	30	6	1
1897.....	153	2.15	52	101	72	81	3	6	3	72	64	5
1898.....	75	1.09	29	46	40	35	8	3	5	30	26	3
1899.....	219	2.94	82	137	104	115	9	6	14	94	80	16
1900.....	255	2.89	108	147	120	135	8	14	16	112	98	7
1901.....	146	1.83	55	91	79	67	8	6	3	52	67	10
1890-1901.....	1,937	2.18	766	1,171	958	979	78	113	111	749	772	114

Influenza by Age Periods, 1890 to 1901.

YEARS.	Under 1.	1 to 5.	5 to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Not stated.
1890.....	14	18	4	8	14	22	18	17	19	17	11	5	1
1891.....	11	12	.....	8	14	6	14	21	29	42	19	1	.....
1892.....	26	20	2	6	13	19	25	33	74	74	41	3	.....
1893.....	7	5	4	3	6	1	7	4	13	16	16	2	1
1894.....	6	14	2	5	11	6	20	12	32	37	17	4	.....
1895.....	14	10	1	5	8	6	9	10	16	24	9	3	.....
1896.....	1	3	2	1	1	2	2	4	13	6	6	1	.....
1897.....	11	1	2	5	2	10	10	22	22	38	25	5	.....
1898.....	12	4	1	1	4	6	5	8	7	13	8	6	.....
1899.....	27	15	3	4	11	13	13	26	24	53	23	7	.....
1900.....	9	7	1	2	14	9	13	25	56	65	54	.....	.....
1901.....	14	2	3	2	4	9	6	18	29	35	24	.....	.....
1890-1901.....	152	111	25	50	102	109	142	200	334	420	253	37	2
Per cent. of all ages for 12 yrs., 1890-1901.....	7.85	5.73	1.29	2.58	5.27	5.63	7.33	10.33	17.24	21.68	13.06	1.91	.10

* Exclusive of Providence city.

Influenza by Months, 1890 to 1901, inclusive.

YEARS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
1890.....	108	27	11	8	4	2	2	.....	1	3	1	1	168
1891.....	4	3	1	22	19	19	2	2	2	4	1	98	177
1892.....	198	52	31	27	9	6	.....	2	3	2	1	5	396
1893.....	5	1	2	10	12	4	1	2	1	1	1	36	85
1894.....	102	27	10	9	7	3	2	1	1	.....	1	3	166
1895.....	12	20	43	16	7	6	5	.....	.....	.....	2	4	115
1896.....	9	4	5	7	5	4	1	2	2	1	.....	2	42
1897.....	26	67	29	11	4	3	.....	.....	2	2	3	6	153
1898.....	7	2	15	13	9	5	2	.....	1	.....	1	20	75
1899.....	93	59	27	16	7	1	.....	3	1	2	2	8	219
1900.....	5	16	53	134	26	8	.....	3	.....	1	4	5	255
1901.....	38	48	27	13	9	3	.....	.....	1	.....	3	4	146
1890-1901.....	607	326	254	295	118	64	15	15	15	16	20	192	1,937

INSANITY.

There were 33 deaths from insanity, in 1901, a decrease of 21 from 1900. The percentage to the whole number of deaths was .41. These deaths occurred chiefly at the Cranston institutions, and in the Butler Hospital.

Sex.—There were 18 male and 15 female decedents.

Parentage.—The number of native decedents from insanity was 10, and of foreign parentage 23.

Of the 33 deaths in 1901, there were 5 from dementia, 18 from insanity, 5 from acute mania, 1 from chronic mania, and 4 from melancholia.

Of the 5 deaths from dementia, the secondary cause given in 1 case was diarrhœa; 1, chronic nephritis; 1, lepto-meningitis; 1, melancholia; and 1 case with no secondary cause given.

Of the 18 deaths from insanity, the secondary cause given in 11

cases was general paralysis; 3, Bright's disease; 1, sarcoma of vulva; and 2 with no secondary cause given.

Of the 6 deaths from acute and chronic mania, the secondary cause given in 3 cases was Bright's disease; 1, enteritis; and 2 with no secondary cause given.

Of the 4 deaths from melancholia, the secondary cause in 1 case was nephritis; and 1, monomania, with no secondary cause given in 2 cases.

The following Table shows the mortality in the State from insanity for thirty-six years, with percentage to deaths from all causes, sex, parentage, etc., from 1866 to 1901, inclusive:

TABLE LXXX.

Mortality in the State from Insanity, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870..	72	.47	33	39	52	20	.....	5	4	7	55	1
1871-1875.....	106	.52	55	51	76	30	3	2	8	33	58	2
1876.....	12	.28	5	7	9	3	1	2	1	1	6	1
1877.....	19	.49	9	10	9	10	.....	1	.....	5	12	1
1878.....	22	.50	5	17	16	6	.....	.....	1	3	17	1
1879.....	17	.40	11	6	10	7	.....	.....	.....	5	11	1
1880.....	19	.39	9	10	13	6	.....	1	2	6	9	1
1876-1880.....	89	.39	39	50	57	32	1	4	4	20	55	5
1881.....	32	.63	15	17	22	10	1	1	3	10	16	1
1882.....	23	.45	9	14	18	5	.....	1	.....	8	12	2
1883.....	29	.55	12	17	17	12	1	2	.....	7	18	1
1884.....	36	.69	17	19	24	12	2	3	.....	21	9	1
1885.....	35	.67	16	19	18	17	.....	.....	2	23	10	.....
1881-1885.....	155	.59	69	86	99	56	4	7	5	69	65	5
1886.....	49	.83	21	28	28	21	3	1	1	37	7	.....
1887.....	64	1.01	35	29	33	31	1	.....	1	56	.....	6
1888.....	43	.64	21	22	24	19	1	2	.....	33	7	.....
1889.....	22	.35	14	8	12	10	.....	.....	.....	14	8	.....
1890.....	30	.44	19	11	16	14	1	1	1	13	14	.....
1886-1890.....	208	.65	110	98	113	95	6	4	3	153	36	6
1891.....	21	.32	10	11	16	5	.....	1	.....	5	13	2
1892.....	27	.37	17	10	15	12	3	1	.....	8	14	1
1893.....	39	.53	14	25	13	26	.....	.....	.....	30	9	.....
1894.....	49	.68	20	29	22	27	1	1	.....	27	18	2
1895.....	72	.96	36	36	44	28	3	.....	1	41	27	.....
1891-1895.....	208	.57	97	111	110	98	7	3	1	111	81	5
1896.....	53	.70	28	25	22	31	.....	2	.....	40	11	.....
1897.....	103	1.45	53	50	51	52	.....	3	4	73	12	6
1898.....	82	1.19	41	41	37	45	3	.....	2	60	10	7
1899.....	66	.88	37	29	33	33	3	2	1	55	5	.....
1900.....	54	.61	29	25	33	21	1	1	2	45	5	.....
1896-1900.....	358	.95	188	170	176	182	7	8	9	278	43	13
1901.....	33	.41	18	15	10	23	.....	.....	26	7	.....	.....
Total, 36 years....	1,329	.62	609	620	693	536	28	33	60	678	393	37

* Exclusive of Providence city.

DISEASES OF THE KIDNEYS.

There were 505 deaths returned, during 1901, with diseases of the kidneys assigned as the cause.

This number represents 6.3 per cent. of all causes, and a proportion of 1.15 to every 1,000 of the population.

Sex.—Of the 505 there were 266 males and 239 females.

Parentage.—There were 224 of native parentage and 281 of foreign, or about 80 of native to every 100 of foreign parentage.

Age.—Of the 505 decedents from kidney diseases, 12 were under five years of age, 18 from five to twenty, 89 from twenty to forty, 160 from forty to sixty, 197 from sixty to eighty, 29 eighty and over.

Diseases of the kidneys have largely increased in number, and much more largely in proportion, during the last thirty-six years.

During the ten years from 1866 to 1875, inclusive, the proportion of deaths from kidney diseases, to whole number of deaths from all causes, was but little more than one per cent., while during the ten years from 1886 to 1895, inclusive, the proportion was over four and one-half per cent.

The following Table will present various facts in relation to the mortality from diseases of the kidneys in Rhode Island, for thirty-six years, 1866–1901 :

TABLE LXXXI.

Mortality in the State from Kidney Diseases, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870..	135	.88	94	41	91	44	6	7	25	23	66	8
1871-1875.....	295	1.44	167	128	187	108	11	11	17	67	172	17
1876.....	50	1.23	22	28	32	18	1	1	7	10	28	3
1877.....	67	1.57	40	27	35	32	2	1	.....	14	49	1
1878.....	80	1.89	50	30	49	31	4	3	3	21	47	2
1879.....	79	1.88	51	28	44	35	1	3	1	23	43	8
1880.....	91	2.02	52	39	51	40	1	5	10	27	46	2
1876-1880.....	367	1.65	215	152	211	156	9	13	21	95	213	16
1881.....	79	1.69	40	39	47	32	7	5	4	14	48	1
1882.....	86	1.79	50	36	45	41	2	5	10	15	52	2
1883.....	129	2.43	72	57	74	55	5	2	17	37	60	8
1884.....	118	2.29	53	65	66	52	5	11	12	28	54	8
1885.....	159	2.97	92	67	86	73	8	10	17	31	88	5
1881-1885.....	571	2.20	307	264	318	253	27	33	60	125	302	24
1886.....	155	2.49	85	70	93	62	3	10	22	37	71	12
1887.....	169	2.66	92	77	90	79	5	6	16	43	92	7
1888.....	213	3.23	102	111	122	91	10	10	24	46	115	8
1889.....	210	3.38	119	91	122	88	14	13	15	62	96	10
1890.....	229	3.20	116	113	109	120	15	8	21	59	116	10
1886-1890.....	976	3.05	514	462	536	440	47	47	98	247	490	47
1891.....	245	3.06	123	122	122	123	9	12	25	72	114	13
1892.....	258	3.49	135	123	127	131	9	11	24	70	128	16
1893.....	302	4.06	154	148	141	161	19	15	25	81	147	15
1894.....	313	4.37	152	161	164	149	22	20	33	84	136	18
1895.....	341	4.54	176	165	171	170	23	19	29	96	163	11
1891-1895.....	1,459	3.90	740	720	725	734	82	77	136	403	688	73
1896.....	395	5.26	209	186	188	207	19	39	34	125	160	18
1897.....	387	5.44	198	189	185	202	24	19	30	129	164	21
1898.....	471	6.82	228	243	207	264	19	23	25	153	219	32
1899.....	477	6.40	241	236	215	262	23	30	33	148	223	20
1900.....	516	5.85	240	276	275	241	16	19	25	186	236	34
1896-1900.....	2,246	5.94	1,116	1,130	1,070	1,176	101	130	147	741	1,002	125
1901.....	505	6.34	266	239	224	281	20	33	33	167	231	21
Total, 36 years....	6,554	3.81	3,419	3,135	3,362	3,192	303	351	537	1,868	3,164	331

* Exclusive of Providence city.

DISEASES OF THE LIVER.

There were 100 deaths reported, in 1901, as having been caused by structural diseases of the liver.

This number represents 1.26 per cent. of all causes, and a proportion of .23 to every 1,000 of the population.

Of the 100 decedents, there were 54 males and 46 females.

There were 31 of native parentage and 69 of foreign.

Seventy-eight of the whole number were of persons of 40 years of age and over.

In the age period of from 5 to 40, there were but 16 decedents from diseases of the liver.

The mortality from such diseases does not depend to any marked extent upon the influence of season.

Table LXXXII will present various facts relating to diseases of the liver during thirty-six years.

TABLE LXXXII.

Mortality from Diseases of the Liver, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.	Providence City.	Washington County.
1866-1870.....	201	1.31	113	88	118	83	12	14	36	47	70	22
1871-1875.....	202	.98	91	111	119	83	18	14	12	56	88	14
1876.....	45	1.09	26	19	27	18	1	5	5	11	18	5
1877.....	52	1.17	23	29	31	21	1	.....	7	16	24	4
1878.....	49	1.10	25	24	32	17	8	1	6	14	18	2
1879.....	52	1.24	27	25	31	21	4	4	2	14	22	6
1880.....	58	1.27	29	29	40	18	4	3	8	15	25	3
1876-1880.....	256	1.15	130	126	161	95	18	13	28	70	107	20
1881.....	46	.92	30	16	21	25	2	2	6	8	24	4
1882.....	62	1.22	34	28	36	26	3	5	10	17	24	3
1883.....	51	.94	27	24	20	31	5	6	4	16	18	2
1884.....	48	.93	22	26	23	25	5	3	5	2	31	2
1885.....	61	1.13	24	37	32	29	2	6	6	21	24	2
1881-1885.....	268	1.03	137	131	132	136	17	22	31	64	121	13
1886.....	54	.92	29	25	26	28	4	4	4	14	28	....
1887.....	86	1.35	40	46	38	48	3	5	3	31	39	5
1888.....	68	1.03	38	30	36	32	1	5	6	26	26	2
1889.....	70	1.12	30	40	31	39	1	2	10	26	29	2
1890.....	65	.94	42	23	29	36	3	4	6	21	26	5
1886-1890.....	343	1.07	179	164	160	183	12	20	29	120	148	14
1891.....	81	1.23	41	40	28	53	3	4	9	26	38	1
1892.....	89	1.20	39	50	34	55	8	5	4	27	45	5
1893.....	72	.97	43	29	30	42	4	8	6	15	36	3
1894.....	93	1.30	43	50	42	51	2	9	9	42	24	7
1895.....	81	1.07	43	38	28	53	.....	6	10	27	31	7
1891-1895.....	416	1.15	209	207	162	254	12	32	38	137	174	23
1896.....	110	1.47	56	54	37	73	3	7	6	40	48	6
1897.....	58	.82	31	27	22	36	4	3	6	15	25	5
1898.....	91	1.32	41	50	31	60	3	7	6	26	41	8
1899.....	92	1.23	48	44	22	70	5	6	15	25	35	6
1900.....	100	1.13	56	44	36	64	.....	10	7	29	47	7
1896-1900.....	451	1.19	332	219	148	303	15	33	40	135	196	32
1901.....	100	1.26	54	46	31	69	3	8	7	31	46	5
Total, 36 years....	2,237	1.13	1,145	2,092	1,031	1,206	107	156	221	660	950	143

* Exclusive of Providence city.

DROPSY.

During the years 1899, 1900, and 1901, there were no deaths from dropsy so called, all cases so reported having been ascertained to have been the result of some definite cause, and placed in that division.

The continuance of this table has been discontinued, but is here inserted that the changes and advance in perfection of diagnosis may be demonstrated.

TABLE LXXXIII.

*Mortality from Kidney and Liver Diseases compared with Dropsy
(so returned) for thirty-six years, 1866 to 1901.*

YEARS.	DEATHS FROM KIDNEY DISEASES.			DEATHS FROM LIVER DISEASES.			TOTAL DEATHS FROM KIDNEY AND LIVER DISEASES.			DEATHS FROM DROPSY.			Diminution of Dropsy in reference to Kidney and Liver Diseases.	Percentage of Dropsy to all.
	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.		
1866-1870...	135	94	41	201	113	88	336	207	129	302	143	159	-34	1.96
1817-1875...	295	167	128	202	91	111	497	258	239	294	130	164	-203	1.43
1876.....	50	22	28	45	26	19	95	48	47	70	35	35	-25	1.70
1877.....	67	40	27	52	23	29	119	63	56	64	25	39	-55	1.44
1878.....	80	50	30	49	25	24	129	75	54	44	23	21	-85	.99
1879.....	79	51	28	52	27	25	131	78	53	54	28	26	-77	1.21
1880... ..	91	52	39	58	29	29	149	81	68	46	22	24	-103	.95
1876-1880...	367	215	152	256	130	126	623	345	278	278	133	145	-345	1.25
1881.....	79	40	39	46	30	16	125	70	55	48	23	25	-77	.96
1882.....	86	50	36	62	34	28	148	84	64	52	23	29	-96	1.02
1883.....	129	72	57	51	27	24	180	99	81	47	21	26	-133	.89
1881.....	118	53	65	48	22	26	166	75	91	40	20	20	-126	.73
1885.....	159	92	67	61	24	37	220	116	104	44	30	14	-176	.82
1881-1885...	571	307	264	268	137	131	839	444	395	231	117	114	-608	.89
1886.....	155	85	70	54	29	25	209	114	95	45	18	27	-164	.77
1887.....	169	92	77	86	40	46	255	132	123	35	14	21	-220	.55
1888.....	213	102	111	68	38	30	281	140	141	47	18	29	-234	.71
1889.....	210	119	91	70	30	40	280	140	131	42	14	28	-238	.67
1890... ..	229	116	113	65	42	23	294	158	136	44	18	26	-250	.63
1886-1890...	976	514	462	343	179	164	1,319	693	626	213	82	131	-1106	.67
1891.....	245	123	122	81	41	40	326	164	162	35	8	27	-291	.52
1892.....	258	135	123	89	39	50	347	174	173	39	17	22	-308	.53
1893.....	302	154	148	72	43	29	374	197	177	39	11	28	-335	.52
1894.....	313	152	161	93	43	50	406	195	211	7	3	4	-399	.10
1895.....	341	176	165	81	43	38	422	219	203	4	1	3	-418	.05
1891-1895...	1,459	740	719	416	209	207	1,875	949	926	124	40	84	-1751	.34
1896.....	395	209	186	110	56	54	505	265	240	2	1	1	-503	.03
1897.....	387	198	189	58	31	27	445	229	216	2	1	1	-443	.03
1898.....	471	228	243	91	41	50	562	269	293	3	1	2	-559	.04
1899.....	477	241	236	92	48	44	569	289	280	.....	.....	.....	-569	.....
1900.....	516	240	276	100	56	44	616	296	320	.....	.....	.....	-616	.....
1896-1900...	2,246	1,116	1,130	451	232	219	2,697	1,348	1,349	7	3	4	-2690	.....
1901.....	505	266	239	100	54	46	605	320	285	.....	.....	.....	-605	.....
Total, 36 yrs	6,551	3,419	3,135	2,237	1,145	2,092	8,791	4,564	4,227	1,456	651	805	-7335	.74

MEASLES.

There were 15 decedents from measles as a cause of death in 1901.

This number represents .19 per cent. of all causes, and a proportion of .03 to every 1,000 of the population.

Of the 15, there were 10 males and 5 females.

Of parentage, there were 3 of native and 12 of foreign.

During the last ten years the proportion of mortality from measles has been about 53 of native to every 100 of foreign parentage.

During 1901 the number of decedents under 5 years of age was 14.

The number in the different divisions of the State may be found in Table LXXXIV.

TABLE LXXXIV.

Mortality in the State from Measles, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870..	92	.60	44	48	26	66	6	4	12	35	25	....
5 years, 1871-1875..	102	.50	43	59	53	49	5	12	7	39	35	4
1876.....	4	.10	.....	4	1	3	.....	.....	.....	4	.....	.....
1877.....	11	.25	3	8	2	9	.....	.....	1	8	2	.....
1878.....	81	1.82	39	42	25	56	2	3	.....	26	50	.....
1879.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1880.....	9	.20	3	6	2	7	.....	.....	.....	6	3	.....
1876-1880.....	105	.47	45	60	30	75	2	3	1	44	55	.....
1881.....	37	.74	17	20	15	22	.....	1	2	9	25	.....
1882.....	6	.12	1	5	.....	6	.....	.....	.....	2	4	.....
1883.....	14	.27	11	3	9	5	.....	1	.....	3	8	2
1884.....	18	.35	10	8	5	13	1	6	1	3	7	.....
1885.....	45	.84	27	18	19	26	.....	7	2	27	8	1
1881-1885.....	120	.46	66	54	48	72	1	15	5	44	52	3
1886.....	18	.30	11	7	4	14	.....	5	.....	4	9	.....
1887.....	132	2.08	69	63	57	75	.....	5	8	26	90	3
1888.....	11	.22	5	6	3	8	.....	2	.....	7	2	.....
1889.....	29	.47	15	14	10	19	.....	8	.....	7	14	.....
1890.....	92	1.32	45	47	42	50	2	10	.....	41	31	8
1886-1890.....	282	.88	145	137	116	166	2	30	8	85	146	11
1891.....	12	.18	7	5	4	8	1	2	2	3	3	1
1892.....	28	.38	14	14	10	18	.....	2	4	11	11	.....
1893.....	100	1.84	56	44	33	67	.....	11	.....	22	64	3
1894.....	9	.12	4	5	3	6	.....	.....	2	2	5	.....
1895.....	53	.70	24	29	11	42	.....	5	.....	8	40	.....
1891-1895.....	202	.54	105	97	61	141	1	20	8	46	123	4
1896.....	58	.77	28	30	22	36	.....	6	3	28	19	2
1897.....	33	.46	21	12	11	22	5	1	1	8	18	.....
1898.....	18	.26	11	7	3	15	.....	.....	1	12	4	1
1899.....	47	.63	22	25	12	35	.....	5	.....	13	27	2
1900.....	185	2.10	87	98	79	106	4	25	.....	48	99	9
1896-1900.....	341	.90	169	172	127	214	9	37	5	109	167	14
1901.....	15	.19	10	5	3	12	.....	1	.....	10	3	1
Total, 36 years....	1,259	.64	627	632	464	795	26	122	46	412	616	37

* Exclusive of Providence city.

OLD AGE.

The number of deaths, in 1901, attributed to old age as a cause, was 234. This is 16 less than in 1900.

This number represents 2.94 per cent. of all causes, and a proportion of .53 to every 1,000 of the population.

Of the 234 decedents from old age, 83 were males and 151 were females, or about 55 males to every 100 females.

Of the parentage of the 234, there were 147 of native and 87 of foreign parentage.

The following Table will present the statistics of deaths in Rhode Island from old age for thirty-six years:

TABLE LXXXV.

Mortality in the State from Old Age, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.	Providence City.	Washington County.
5 years, 1866-1870..	998	6.48	366	632	764	234	55	102	157	333	267	134
1871-1875.....	1,458	5.64	467	691	833	325	61	103	161	332	348	153
1876.....	341	6.18	107	134	177	64	12	14	28	65	71	41
1877.....	213	5.00	96	117	145	68	12	23	29	57	63	29
1878.....	222	5.25	84	138	172	50	15	8	32	76	61	80
1879.....	220	5.22	82	138	152	68	14	19	26	69	67	25
1880.....	273	5.95	121	152	186	87	12	20	34	90	73	44
1876-1880.....	1,169	5.24	490	679	832	337	65	84	159	357	335	169
1881.....	247	5.29	101	146	167	80	12	24	36	93	72	10
1882.....	383	5.89	110	173	190	93	20	25	40	106	79	13
1883.....	275	5.22	105	170	184	91	17	18	44	91	84	21
1884.....	293	5.68	101	192	196	97	16	20	39	106	86	26
1885.....	267	4.95	86	181	183	84	9	32	47	87	70	22
1881-1885.....	1,365	5.27	503	862	920	446	74	119	206	483	391	92
1886.....	276	4.69	101	175	181	95	16	24	36	100	73	27
1887.....	278	4.38	103	175	167	111	17	19	29	109	76	28
1888.....	290	4.35	108	182	198	92	16	26	25	124	64	35
1889.....	227	3.63	75	152	136	91	10	23	23	73	71	27
1890.....	198	2.87	72	126	123	75	16	19	19	59	63	22
1886-1890.....	1,269	3.97	459	810	805	464	75	111	132	465	347	139
1891.....	185	2.80	83	102	121	64	18	16	26	65	41	19
1892.....	256	3.46	95	161	168	88	9	24	29	91	71	32
1893.....	183	2.44	72	111	113	70	8	16	19	33	92	15
1894.....	187	2.61	60	127	109	78	12	21	23	64	51	16
1895.....	197	2.61	82	115	105	92	17	17	16	87	51	9
1891-1895.....	1,008	2.78	392	616	616	392	64	94	113	340	306	91
1896.....	206	2.74	84	122	112	94	8	23	13	89	57	16
1897.....	159	2.24	51	108	96	63	7	9	6	69	57	11
1898.....	205	2.97	86	119	135	70	9	11	30	79	56	20
1899.....	228	3.06	85	143	148	80	10	16	37	71	72	22
1900.....	250	2.83	96	154	150	100	15	34	42	72	65	22
1896-1900.....	1,048	2.77	402	646	641	407	49	93	128	380	307	91
1901.....	234	2.94	83	151	147	87	13	18	33	72	76	22
Total, 36 years....	8,249	4.17	3,162	5,087	5,558	2,691	456	724	1,089	2,712	2,377	891

* Exclusive of Providence city.

PERITONITIS.

There were 20 deaths which were caused by peritonitis during 1901.

This number represents .25 per cent. of all causes, and a proportion of .05 to every 1,000 of the population.

Sex.—Of the 20 decedents from peritonitis, there were 6 males and 14 females.

Parentage.—There were 8 of native parentage and 12 of foreign.

PNEUMONIA.

There were 742 decedents from pneumonia in 1901. The number is 224 smaller than in 1900.

This number represents 9.3 per cent. of all causes, and a proportion of 1.7 to every 1,000 of the population.

Sex.—Of the 742 decedents from pneumonia, and including congestion of the lungs, 400 were males and 342 were females; or about 85 females to every 100 males.

Parentage.—By parentage, there were 324 of native and 418 of foreign parentage. The proportion of decedents from pneumonia was about 78 of native to each 100 of foreign parentage.

Season.—There were 431, or over 58 per cent., of the deaths that occurred during the first four months of the year. The largest mortality, by months, was 123 in February, 109 in January, 100 in March, and 99 in April.

Pneumonia, as a cause of death, has increased in the ratio to whole number of deaths, during the last thirty-six years; from an average of 6.3 per cent. during the first ten years to an average of 9.2 per cent. during the last ten, including 1901.

The following Table presents, for each of the last thirty-six years, the number and the percentage, with the sex and the parentage of the decedents from pneumonia, and the number in each year, in each division of the State:

TABLE LXXXVI.

Mortality in the State from Pneumonia, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PERCENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870..	928	6.0	467	461	556	372	43	56	66	287	407	60
1871-1875.....	1,331	6.5	667	664	783	548	54	71	62	385	662	97
1876.....	339	8.2	164	175	162	177	13	23	16	97	163	27
1877.....	226	5.1	104	122	127	99	10	7	14	81	98	16
1878.....	317	7.1	143	174	176	141	10	11	18	110	140	23
1879.....	311	7.4	148	163	163	148	7	15	15	103	156	15
1880.....	364	7.9	180	184	177	187	26	16	18	92	192	20
1876-1880.....	1,557	7.0	739	818	805	752	66	72	81	483	749	106
1881.....	327	6.5	177	150	190	137	10	23	17	81	174	22
1882.....	314	7.2	178	166	163	181	10	22	24	61	176	21
1883.....	400	7.8	192	208	198	202	19	21	34	108	204	14
1884.....	363	7.1	167	196	192	171	10	13	17	125	172	26
1885.....	465	8.6	214	251	271	194	15	20	33	151	227	19
1881-1885.....	1,899	7.3	928	971	1,014	885	64	99	125	556	953	102
1886.....	481	8.2	232	249	234	247	17	29	37	161	209	28
1887.....	488	7.7	260	228	227	261	13	27	39	142	227	40
1888.....	508	7.7	274	234	227	281	16	37	29	171	219	36
1889.....	483	7.7	255	228	213	270	18	37	29	169	208	22
1890.....	569	8.2	288	281	247	322	16	36	30	206	246	35
1886-1890.....	2,529	7.9	1,309	1,220	1,148	1,381	80	166	164	849	1,109	161
1891.....	568	8.5	270	298	247	321	17	40	70	183	232	26
1892.....	655	8.8	335	320	265	390	18	57	52	216	277	35
1893.....	776	10.4	412	364	319	457	18	42	49	232	392	43
1894.....	665	9.3	344	321	305	360	18	47	46	234	276	54
1895.....	685	9.1	340	345	289	396	28	49	25	243	292	48
1891-1895.....	3,349	9.2	1,701	1,648	1,425	1,924	99	235	242	1,098	1,469	206
1896.....	669	8.9	366	303	274	395	23	45	39	263	256	43
1897.....	635	8.9	337	298	263	367	25	33	36	254	231	36
1898.....	542	7.8	299	243	218	324	8	39	41	198	241	15
1899.....	686	9.2	357	329	317	369	12	66	62	204	314	28
1900.....	966	10.9	479	487	373	593	25	90	43	323	451	34
1896-1900.....	3,498	9.3	1,838	1,660	1,450	2,048	93	273	221	1,242	1,513	156
1901.....	742	9.3	400	342	321	421	24	69	46	262	293	46
Total, 36 years....	15,833	8.0	8,049	7,784	7,505	8,328	523	1,041	1,007	5,162	7,155	945

* Exclusive of Providence city.

TABLE LXXXVII.

Exhibiting the Number of Decedents from Pneumonia, in each of the several Periods of Life, during each of the last thirty-six years, from 1866 to 1901, inclusive.

YEARS.	PERIODS OF LIFE.											
	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1866.....	57	4	4	5	12	10	14	21	25	32	9	.....
1867.....	57	9	2	3	10	11	13	16	25	13	12	1
1868.....	70	4	3	3	15	8	16	18	19	27	13	.....
1869.....	64	11	1	2	11	12	9	28	25	16	11	.....
1870.....	84	6	5	4	6	7	8	14	20	19	8	1
1871.....	71	7	2	7	10	17	16	16	35	17	19	1
1872.....	83	5	1	7	17	20	19	22	24	19	11	1
1873.....	105	4	8	3	10	14	16	17	24	23	10	.....
1874.....	76	9	4	6	17	17	25	21	40	27	8	.....
1875.....	120	9	3	8	22	30	25	39	61	43	28	2
1876.....	116	5	4	3	20	20	32	35	48	39	17	.....
1877.....	79	2	.....	7	15	15	24	27	22	24	9	2
1878.....	115	9	4	10	14	17	28	20	42	45	13	.....
1879.....	102	8	1	3	14	27	26	35	38	38	19	.....
1880.....	95	18	3	16	14	33	37	46	47	43	12	.....
1881.....	102	4	2	5	15	22	26	45	48	31	26	1
1882.....	71	3	4	14	22	36	49	33	41	46	21	4
1883.....	88	15	2	13	32	33	40	53	49	46	27	2
1884.....	103	14	5	11	23	34	24	32	53	37	23	4
1885.....	121	9	10	8	23	29	50	49	76	59	29	2
1886.....	111	10	7	19	32	35	50	58	74	55	30	.....
1887.....	132	15	7	7	32	43	51	56	64	53	28	.....
1888.....	103	20	5	15	49	48	61	62	70	54	21	.....
1889.....	120	14	3	20	27	36	51	57	77	47	31	.....
1890.....	161	7	10	12	46	55	55	55	79	54	33	2
1891.....	126	10	4	11	42	54	60	70	84	70	37	.....
1892.....	139	10	9	10	39	69	75	74	110	71	44	5
1893.....	176	25	8	17	49	68	96	115	102	70	50	.....
1894.....	169	19	9	18	47	56	67	72	78	77	52	1
1895.....	172	16	9	20	49	56	77	66	94	77	49	.....
1896.....	220	20	7	17	33	55	56	71	83	66	40	1
1897.....	194	14	10	17	33	46	58	58	73	75	57	.....
1898.....	202	11	4	9	23	39	40	58	66	54	36	.....
1899.....	238	14	6	19	38	53	50	62	78	74	53	1
1900.....	338	24	7	21	53	77	86	105	109	90	54	2
1901.....	185	20	5	21	49	57	91	94	93	77	49	1
Total, 36 years....	4,565	404	178	391	963	1,259	1,531	1,715	2,096	1,708	989	34

Age.—Of the decedents from pneumonia, during the period of thirty-six years, 29 per cent. were under five years of age. Of over fifty years of age the number of decedents was 41 per cent. of the whole number. The following summary will present the percentages for 1901, in round numbers :

Under five years of age.....	25 per cent.
Five years and under twenty, and not stated.....	6 per cent.
Twenty years and under fifty ...	27 per cent.
Fifty years and over	42 per cent.

SCARLET FEVER.

The number of deaths returned as having been caused by scarlet fever, in 1901, was 21. The number is 13 less than in 1900.

This number represents .3 per cent. of all causes, and a proportion of .04 to every 1,000 of the population.

Sex.—Of the 21 decedents from scarlet fever, 10 were males and 11 were females.

Parentage.—There were 9 of native parentage and 12 of foreign.

The following Table will present the statistics of scarlet fever for the last forty-six years, from 1856 to 1901, inclusive, the number and percentage and sex of the decedents from scarlet fever, and the number from scarlet fever in each division of the State. It also shows, from 1866 to 1901, inclusive, the parentage of the decedents from scarlet fever :

TABLE LXXXVIII.

Mortality in the State from Scarlet Fever, 1856 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
10 years. 1856-1865.	1,440	5.2	700	740	+	+	57	79	191	414	634	65
1866-1870.....	496	3.2	231	265	210	286	26	32	27	142	236	33
1871-1875.....	1,053	5.1	503	550	513	540	40	53	51	302	534	73
1876.....	80	1.9	34	46	42	38	3	2	7	21	35	12
1877.....	62	1.4	26	36	29	33	14	4	3	21	12	8
1878.....	86	1.9	41	45	35	51	3	5	3	14	57	4
1879.....	311	7.4	164	147	130	181	3	6	4	37	255	6
1880.....	468	10.0	215	253	216	252	22	30	11	143	243	19
1876-1880.....	1,007	4.5	480	527	452	555	45	47	28	236	602	49
1881.....	138	3.0	79	59	62	76	11	25	12	41	45	4
1882.....	45	0.9	24	21	16	29	.....	3	16	7	18	1
1883.....	34	0.6	17	17	14	20	1	1	5	9	16	2
1884.....	94	1.8	39	58	41	56	.....	.....	8	28	57	4
1885.....	91	1.7	36	55	48	43	.....	3	6	24	38	20
1881-1885.....	405	1.6	195	210	181	224	12	32	47	109	174	31
1886.....	88	1.5	46	42	29	59	.....	13	2	41	30	2
1887.....	266	4.2	120	146	95	171	9	16	4	80	154	3
1888.....	207	3.1	101	106	91	116	1	29	10	87	80	....
1889.....	51	0.8	24	27	14	37	3	2	6	14	25	1
1890.....	16	0.2	11	5	6	10	.....	3	.....	2	8	3
1886-1890.....	628	2.0	302	326	235	393	13	63	22	224	297	9
1891.....	33	0.5	17	16	12	21	1	3	.....	9	17	3
1892.....	67	0.9	38	29	21	46	1	4	4	20	38	....
1893.....	193	2.6	86	107	75	118	1	23	3	68	97	1
1894.....	123	1.7	59	64	52	71	2	8	2	55	56	....
1895.....	107	1.4	52	55	42	65	1	2	3	37	63	1
1891-1895.....	523	1.4	252	271	202	321	6	40	12	189	271	5
1896.....	53	0.7	20	23	24	29	.....	2	1	9	33	8
1897.....	29	0.4	15	14	13	16	1	1	4	10	12	1
1898.....	21	0.3	10	11	14	7	.....	1	1	13	4	2
1899.....	29	0.4	17	12	13	16	.....	3	.....	6	19	1
1900.....	34	0.3	24	10	22	12	.....	1	6	16	11	...
1896-1900.....	166	0.4	96	70	86	80	1	8	12	54	79	12
1901.....	21	0.3	10	11	9	12	.....	2	2	8	9	....
Total, 46 years....	5,739	2.9	2,769	2,970	1,888	2,411	200	356	392	1,678	2,836	277

* Not including Providence city.

+ Records incomplete.

CROUP, DIPHTHERIA, AND SCARLET FEVER.

Season and Mortality.

The following Table is continued, to show by comparison the influence of season in regard to the mortality from croup and scarlet fever for forty-eight years, and diphtheria for forty-four years. The Table will give the average monthly and quarterly percentages of deaths from each cause :

TABLE LXXXIX.

MONTHS.	CROUP. — 1853-1901.		DIPHTHERIA. — 1858-1901.		SCARLET FEVER. — 1853-1901.	
	Number of deaths.	Per cent.	Number of deaths.	Per cent.	Number of deaths.	Per cent.
January.....	406	12.66	615	9.85	784	12.19
February.....	358	11.17	461	7.38	715	11.12
March.....	293	9.11	488	7.82	639	9.93
First Quarter.....	1,057	32.97	1,564	25.05	2,138	33.24
April.....	236	7.36	428	6.86	557	8.66
May.....	167	5.21	426	6.82	579	9.00
June.....	141	4.40	369	5.94	490	7.62
Second Quarter.....	544	16.97	1,223	19.59	1,626	25.28
July.....	108	3.37	338	5.41	367	5.71
August.....	90	2.81	363	5.82	305	4.74
September.....	186	5.80	460	7.37	320	4.97
Third Quarter.....	384	11.98	1,161	18.60	992	15.42
October.....	334	10.42	769	12.32	445	6.92
November.....	450	14.03	816	13.07	538	8.37
December.....	437	13.63	710	11.37	693	10.77
Fourth Quarter.....	1,221	38.08	2,295	36.76	1,676	26.06
Totals.....	3,206	100.00	6,243	100.00	6,432	100.00

SUICIDE.

The number of deaths by suicide, in Rhode Island, during 1901, was 55, which is the same number as in the preceding year.

There were 46 male and 9 female decedents from that cause, or a proportion of 5 males to every 1 of the females.

Of the 55, 24 were of native parentage and 31 of foreign.

The means of self-destruction, according to the returns, were as follows :

By cutting throat, 4 ; by drowning, 7 ; by hanging, 13 ; by illuminating gas, 4 ; by chloroform, 1 ; by shooting, 15 ; by arsenic, 1 ; by carbolic acid, 4 ; by morphine, 2 ; by " paris green," 3 ; by "rough on rats," 1.

TABLE XC.

Mortality in the State from Suicide, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870..	86	.56	67	19	66	20	2	7	6	31	34	6
1871-1875.....	89	.43	61	28	57	32	3	9	6	20	43	8
1876.....	18	.46	15	3	6	12	.....	.....	1	5	10	2
1877.....	22	.52	16	6	15	7	.....	2	1	5	12	2
1878.....	21	.50	16	5	12	9	3	2	.....	5	7	4
1879.....	13	.31	10	3	5	8	.....	.....	.....	5	7	1
1880.....	10	.20	5	5	8	2	.....	1	1	6	2	.....
1876-1880.....	84	.38	62	22	46	38	3	5	3	26	38	9
1881.....	23	.49	19	4	15	8	.....	5	3	.....	14	1
1882.....	31	.64	23	8	23	8	1	4	3	8	12	3
1883.....	25	.47	18	7	11	14	.....	.....	2	8	15	.....
1884.....	22	.43	20	2	13	9	.....	1	1	6	11	3
1885.....	20	.37	16	4	11	9	1	1	6	3	6	3
1881-1885.....	121	.47	96	25	73	48	2	11	15	25	58	10
1886.....	17	.29	16	1	12	5	1	3	2	4	7	.....
1887.....	16	.25	13	3	8	8	2	.....	2	5	7	.....
1888.....	21	.42	20	1	15	6	.....	1	3	6	9	2
1889.....	24	.38	20	4	9	15	.....	2	5	7	10	.....
1890.....	19	.28	15	4	12	7	2	.....	1	8	5	3
1886-1890.....	97	.30	84	13	56	41	5	6	13	30	38	5
1891.....	40	.61	27	13	15	25	2	2	.....	10	24	2
1892.....	19	.26	15	4	10	9	.....	.....	4	6	8	1
1893.....	21	.38	18	3	10	11	.....	2	.....	7	12	.....
1894.....	45	.63	36	9	24	21	1	3	5	14	19	3
1895.....	31	.41	22	9	13	18	3	2	5	5	13	3
1891-1895.....	156	.46	118	38	72	84	6	9	14	42	76	9
1896.....	38	.51	28	10	20	18	2	1	2	11	20	2
1897.....	41	.58	33	8	21	20	.....	4	5	11	18	3
1898.....	46	.67	38	8	20	26	.....	3	4	14	24	1
1899.....	41	.55	30	11	18	23	1	2	1	7	27	3
1900.....	55	.62	42	13	25	30	1	2	7	24	19	2
1896-1900.....	221	.58	171	50	104	117	4	12	19	67	108	11
1901.....	55	.69	46	9	24	31	3	8	2	26	15	1
Total, 36 years....	909	.46	705	204	498	411	28	67	78	267	410	59

* Exclusive of Providence city.

WHOOPIING COUGH.

The number of deaths from whooping cough, returned in 1901, was 17, and was 69 less than the number in 1900.

Of the 17 decedents from whooping cough, 6 were males and 11 were females.

There were 9 decedents of native parentage and 8 of foreign.

All of the decedents were under 5 years of age.

The following Table will present the mortality from whooping cough for thirty-six years, 1866-1901, inclusive, with the death rate, sex, parentage, etc., of the decedents :

TABLE XCI.

Mortality in the State from Whooping Cough, 1866 to 1901, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870..	153	.99	78	75	68	85	2	13	14	54	63	7
1871-1875.....	160	.78	65	95	64	96	4	11	13	56	73	3
1876.....	48	1.17	19	29	20	28	5	3	1	7	31	1
1877.....	32	.72	18	14	6	26	.....	.....	1	15	16	....
1878.....	54	1.22	26	28	30	24	.....	1	.....	9	43	1
1879.....	43	.96	17	26	22	21	.....	11	1	12	15	4
1880.....	20	.41	10	10	7	13	.....	.....	2	6	11	1
1876-1880.....	197	.88	90	107	85	112	5	15	5	49	116	7
1881.....	68	1.36	33	35	30	38	.....	2	2	24	40	....
1882.....	71	1.40	33	38	32	39	.....	4	.....	26	40	1
1883.....	9	.17	6	3	5	4	1	.....	.....	4	4	....
1884.....	43	.83	17	26	23	20	5	.....	2	6	28	2
1885.....	42	.79	23	19	24	18	.....	1	4	9	24	4
1881-1885.....	233	.90	112	121	114	119	6	7	8	69	136	7
1886.....	49	.83	28	21	17	32	4	3	.....	18	23	1
1887.....	21	.32	9	12	10	11	.....	.....	4	6	10	1
1888.....	44	.75	17	27	16	28	.....	3	2	11	28	....
1889.....	77	1.23	39	38	36	41	1	12	1	20	43	....
1890.....	70	1.00	25	45	25	45	2	2	7	27	30	2
1886-1890.....	261	.82	118	143	104	157	7	20	14	82	134	4
1891.....	77	1.16	39	38	37	40	3	1	3	15	54	1
1892.....	25	.34	10	15	14	11	.....	1	3	12	9	....
1893.....	23	.31	8	15	9	14	1	.....	4	9	7	2
1894.....	129	1.80	52	77	62	67	3	19	15	33	55	4
1895.....	45	.60	19	26	13	32	.....	8	2	7	27	1
1891-1895.....	299	.84	128	171	135	164	7	29	27	76	152	8
1896.....	59	.79	25	34	24	35	2	4	7	16	24	6
1897.....	56	.79	27	29	26	30	1	8	11	14	17	5
1898.....	96	1.39	37	59	50	46	5	2	4	24	57	4
1899.....	86	1.15	30	56	43	43	1	5	1	30	47	2
1900.....	86	.97	31	55	34	52	4	6	3	25	46	2
1896-1900.....	383	1.01	150	233	177	206	13	25	26	109	191	19
1901.....	17	.21	6	11	9	8	.....	1	1	2	13	....
Total, 36 years....	1,703	.86	747	956	756	947	44	121	108	497	878	55

* Exclusive of Providence city.

TABLE XCII.

Presenting the Ratio of Mortality to the Whole Number of Specified Causes of Death, of Twenty Prominent Causes, for twenty-six years, 1876-1901.

CAUSES OF DEATH.	YEARS.																									
	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
ACCIDENTS (all kinds).....	3.40	3.10	2.89	2.43	3.51	3.04	3.44	2.84	3.80	3.09	3.22	3.25	3.01	3.46	3.60	3.54	4.18	3.58	3.29	3.92	3.96	3.71	4.30	3.71	3.82	4.37
APOPLEXY AND PARALYSIS	4.01	4.25	4.45	5.21	4.67	5.23	5.52	5.39	5.78	5.38	5.69	4.17	5.30	5.17	4.91	5.08	4.89	5.52	6.26	5.57	5.61	6.62	6.04	6.15	5.76	6.30
BRAIN, DISEASES OF	3.64	3.68	3.28	3.73	3.44	3.84	3.60	3.50	2.97	3.61	3.11	3.29	3.43	3.03	3.13	3.36	3.33	3.49	3.11	3.45	4.00	4.63	4.75	3.59	3.30	3.55
BRONCHITIS.....	1.46	1.62	1.89	1.47	1.98	1.80	2.08	2.04	2.29	3.09	2.96	2.77	3.42	4.20	4.01	3.74	4.16	4.24	3.57	3.66	3.69	3.19	3.43	3.24	3.36	2.93
CANCER.....	2.72	3.17	2.82	2.96	2.72	3.11	2.75	3.30	3.03	3.59	2.77	2.50	2.99	3.03	2.41	2.66	2.45	2.78	3.01	3.13	3.02	3.59	4.05	3.93	3.32	3.86
CHOLERA INFANTUM.....	6.41	6.08	3.97	3.81	5.43	5.15	6.77	4.73	6.31	5.16	6.27	5.60	7.08	6.80	8.39	8.25	8.56	8.18	6.98	6.68	7.29	6.00	6.80	6.36	6.34	5.06
CONSUMPTION.....	16.78	15.52	15.98	15.09	14.02	15.12	15.33	15.01	14.34	14.45	14.12	11.19	12.13	11.61	12.29	11.18	10.26	9.79	9.92	11.21	11.32	10.97	12.87	13.07	11.23	12.49
CROUP.....	2.61	2.23	2.20	2.28	1.45	2.16	1.60	1.40	1.55	1.74	1.55	1.79	1.19	1.28	1.19	1.01	1.20	.68	.45	.40	.32	.24	.13	.15	.20	.30
DIARRHŒA.....	1.87	2.11	1.25	1.26	1.52	1.65	1.87	2.55	2.20	1.55	1.59	2.09	1.20	1.40	1.37	1.26	1.73	1.59	1.17	.80	.78	.88	.87	.90	.29	.27

TABLE XCII.—Concluded.

CAUSES OF DEATH.	YEARS.																									
	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
DIPHTHERIA.....	4.07	11.56	10.28	6.14	3.40	4.63	2.10	1.88	2.31	1.83	3.90	4.53	2.86	2.93	3.04	1.54	1.20	2.13	1.87	4.54	3.79	3.26	1.35	1.16	2.16	2.23
DYSENTERY..	1.28	1.22	.95	1.04	.61	.90	1.42	1.06	.78	.68	1.13	1.04	1.11	1.14	1.25	.89	.96	.57	.57	.55	.41	.63	.55	.59	.98	.95
FEVERS.....	3.00	3.55	3.91	2.70	3.37	3.05	4.60	5.12	3.24	2.93	2.87	2.00	3.58	2.29	2.26	2.37	1.88	1.61	2.45	2.20	2.07	1.55	1.55	1.61	1.68	1.59
HEART, DISEASES OF	4.03	4.28	3.92	4.78	5.03	5.68	5.31	6.35	5.60	6.48	6.20	6.46	6.56	7.35	5.84	7.25	6.81	7.26	6.70	7.15	7.44	8.05	7.97	8.85	7.97	8.64
HYDROCEPHALUS	1.74	1.29	1.65	1.96	1.01	1.20	1.02	.87	.81	.31	.41	.41	.47	.20	.37	.34	.30	.42	.17	.21	.23	.23	.20	.17	.22	.09
KIDNEYS, DISEASES OF....	1.25	1.57	1.80	1.88	2.02	1.69	1.79	2.43	2.52	3.14	2.64	2.66	3.24	3.38	3.20	3.71	3.49	4.10	4.41	4.56	5.28	5.46	6.84	6.41	5.87	6.37
LIVER, DISEASES OF.....	1.15	1.06	1.06	1.17	1.20	.82	1.21	.83	.88	.87	1.08	1.34	1.19	1.30	.94	2.23	1.20	.98	1.31	1.08	1.47	.82	1.32	1.24	1.14	1.26
OLD AGE	0.18	5.00	5.25	5.22	5.95	5.29	5.89	5.22	5.68	4.95	4.69	4.98	4.35	3.63	2.87	2.80	3.46	2.48	2.63	2.63	2.76	2.24	2.98	3.07	2.81	2.95
PNEUMONIA.....	8.69	5.31	7.49	7.37	7.90	7.01	7.16	7.84	7.14	8.65	8.18	7.70	7.62	7.69	8.20	8.60	8.85	10.53	9.36	9.15	8.95	8.96	7.87	9.21	10.99	9.36
SCARLET FEVER.....	2.05	1.46	2.03	7.37	9.09	2.96	.94	.64	1.88	1.70	1.50	4.20	3.11	.82	.23	.50	.91	2.62	1.73	1.43	.71	.41	.31	.39	.39	.27
WHOOPING COUGH.....	1.23	.75	1.28	1.02	.44	1.46	1.48	.17	.83	.79	.83	.32	.75	1.23	1.00	1.16	.34	.31	1.82	.60	.79	.79	1.39	1.16	.98	.21

TABLE XCIII.—BIRTHS.

Occupation of the Fathers.—1901.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Actors.....	2	Reed and Harness Makers.....	5
Agents and Canvassers.....	25	Sail.....	4
Architects.....	3	Sash and Blind.....	1
Artesian Well Builders.....	1	Shoe.....	71
Artists.....	4	Soap.....	2
Assayers and Analytical Chemists.....	8	Spectacle.....	2
Baggage Masters.....	3	Spindle.....	3
Bakers.....	98	Spring-bed.....	1
Bankers and Brokers.....	8	Tool.....	39
Bank Officers.....	5	Trunk.....	3
Barbers and Hair Dressers.....	115	Wringer.....	1
Bartenders.....	69	Blacksmiths.....	137
Baseball Players.....	2	Bleachers and Fullers.....	28
Belt Makers.....	4	Boat Builders.....	2
Bobbin.....	1	Bookbinders.....	4
Boiler.....	25	Bookkeepers.....	61
Bolt.....	8	Bootblacks.....	4
Box.....	5	Bottlers.....	9
Brick.....	6	Brakemen.....	33
Brush and Broom.....	3	Brewers.....	16
Cabinet.....	14	Brick and Stone Layers.....	18
Cap.....	1	Building Movers.....	2
Carriage, and Trimmers.....	9	Butchers and Marketmen.....	56
Chess.....	1	Butlers.....	12
Cigar.....	12	Cab Drivers and Hackmen.....	7
Clock and Watch.....	5	Carders.....	36
Comb.....	1	Card Grinders.....	12
Core.....	8	Carpenters.....	420
Glue.....	1	Carpet Layers.....	2
Harness and Saddle.....	8	Chasers.....	10
Lace.....	4	Circus Performers.....	1
Mattress.....	1	Civil Engineers.....	2
Paper.....	1	Clergymen.....	27
Pattern.....	9	Clerks and Salesmen.....	357

TABLE XCIII.—Continued.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Clothiers	14	Drivers	49
Coachmen	43	Druggists and Apothecaries.....	32
Coal and Wood Dealers.....	11	Dyers.....	58
Dry Goods.....	7	Electricians	57
Fish and Oyster.....	8	Electric Light Trimmers.....	3
Furniture.....	5	Enamellers.....	7
Grain	1	Engineers and Firemen.....	207
Hardware	7	Engravers.....	15
Ice.....	1	Expressmen.....	28
Junk.....	7	Farmers.....	323
Leather.....	1	File Cutters	58
Liquor.....	59	File Forgers.....	3
Lumber.....	1	Finishers	10
Music.....	1	Brass	4
News	3	Cloth	5
Oil.....	1	Fire Company Members.....	7
Provision	16	Fishermen and Oystermen.....	44
Shoe.....	16	Florists.....	16
Stencil.....	1	Folders.....	14
Collectors	16	Foundrymen	5
Commercial Travelers	31	Fruiterers.....	14
Compositors.....	10	Furniture Movers.....	1
Concreters	2	Gardeners	46
Conductors and Motormen	99	Gas Fitters.....	4
Confectioners	9	Gate and Crossing Tenders.....	9
Contractors and Builders.....	25	Glass Blowers and Workers.....	1
Cooks and Caterers.....	36	Grocers.....	92
Coopers	5	Hatters.....	2
Coppersmiths	2	Heaters.....	1
Cutters.....	6	Hostlers.....	37
Velvet.....	6	Hotel and Inn Keepers.....	4
Decorators	8	Saloon and Restaurant.....	58
Dentists.....	6	Icemen	5
Designers.....	3	Inspectors.....	13
Die Cutters.....	1	Insurance Agents	41
Die Sinkers.....	2	Real Estate.....	5
Draughtsmen.....	15	Iron Rollers and Workers.....	13

TABLE XCIII.—Continued.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Janitors	24	Organ Grinders	2
Jewelers	246	Painters	207
Shell	1	Paper Hangers	4
Jobbers	4	Pavers	4
Journalists (Editors and Reporters)	5	Pawnbrokers	2
Knitters	11	Paymasters	4
Laborers	2,745	Pearl Workers	4
Lamplighters	1	Peddlers	147
Lapidaries	1	Pentographers	1
Lathers	3	Photographers and Lithographers	7
Laundrymen	14	Physicians	34
Lawyers	15	Piano Tuners	1
Leather Dressers	1	Pilots	3
Life Saving Service Men	5	Plasterers and Stucco Workers	25
Lighthouse Keepers	2	Platers (Electro)	5
Linemen	20	Gold	3
Longshoremen	16	Nickel	2
Loomfixers	81	Silver	1
Lumbermen	2	Plumbers	73
Machinists	407	Polishers	41
Mail Carriers	12	Silver	1
Managers	10	Polo Players	1
Manufacturers	24	Pork and Meat Cutters and Pork Packers	13
Masons	102	Porters	16
Mechanics	29	Pressmen	3
Melters	3	Printers	48
Merchants	87	Calico	1
Milkmen	25	Proofreaders	1
Millers	6	Public Officers	5
Millwrights	2	Pursers	1
Miners	1	Railroad Officials	9
Moulders	82	Employees	18
Musicians	18	Refiners	2
Nurses	4	Gold	1
Officers, Naval	1	Riggers	2
Operatives	588	Roll Coverers	3
Opticians	7	Roofers	1

TABLE XCIII.—Concluded.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Rubber Workers.....	118	Superintendents and Overseers.....	107
Sailors.....	32	Switchmen and Gatemen.....	6
Scissors Grinders.....	1	Tailors.....	98
Sculptors.....	1	Tanners and Curriers.....	7
Sea Captains and Ship Masters.....	5	Teachers and Professors.....	21
Secretaries.....	2	Teamsters.....	345
Servants.....	2	Telephone and Telegraph Operators....	11
Sextons.....	3	Ticket Agents.....	2
Sheriffs, Constables, and Policemen....	39	Tinsmiths.....	29
Ship Carpenters.....	1	Tobaccoists.....	3
Silversmiths.....	42	Traders.....	6
Sketchmakers.....	1	Treasurers.....	2
Slaters.....	1	Typesetters.....	3
Soldiers.....	25	Undertakers.....	6
Spinners.....	116	Upholsterers.....	13
Stable Keepers.....	8	Veterinary Surgeons.....	3
Stampers.....	4	Walters.....	24
Station Agents.....	5	Watchmen.....	31
Steam Pipers.....	21	Weavers.....	592
Steel Rollers and Workers.....	2	Well Diggers.....	1
Stencil Cutters.....	1	Wheelwrights.....	3
Stenographers.....	1	Wire Workers.....	8
Stereotypers.....	1	Wood Choppers.....	7
Stevedores.....	2	Wood Finishers.....	7
Stewards.....	5	Wood Sawyers.....	2
Stone Cutters and Marble Workers.....	55	Wood Turners.....	10
Store Keepers.....	19	Wool Sorters.....	10
Students.....	2		

TABLE XCIV.—MARRIAGES.

Occupations of the Grooms.—1901.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Actors.....	6	Sail Makers.....	1
Advertisers.....	1	Screw.....	1
Agents and Canvassers.....	8	Shoe.....	21
Architects.....	1	Shovel.....	1
Army Officers.....	1	Soap.....	1
Naval.....	1	Tool.....	24
Artists.....	5	Wringer.....	4
Assayers and Analytical Chemists.....	5	Blacksmiths.....	36
Authors.....	1	Bleachers and Fullers.....	13
Baggage Masters.....	6	Boat Builders.....	1
Bakers.....	36	Bookbinders.....	3
Bankers and Brokers.....	13	Bookkeepers.....	35
Bank Officers.....	2	Booksellers.....	2
Barbers.....	29	Bottlers.....	7
Bartenders.....	23	Brakemen.....	15
Bellmen.....	2	Brewers.....	4
Bicycle Makers.....	1	Brick and Stone Layers.....	7
Boiler.....	6	Butchers and Marketmen.....	24
Bolt.....	3	Butlers.....	5
Box.....	3	Buyers.....	4
Brick.....	1	Cab Drivers and Hackmen.....	4
Cabinet.....	4	Capitalists.....	1
Cap.....	1	Cards.....	17
Carriage, and Trimmers.....	2	Card Grinders.....	10
Cigar.....	2	Carpenters.....	115
Clock and Watch.....	3	Chasers.....	2
Comb.....	2	Chiropodists.....	1
Core.....	5	Civil Engineers.....	14
Gas.....	1	Clergymen.....	15
Harness and Saddle.....	6	Clerks and Salesmen.....	296
Lace.....	1	Clothiers.....	2
Mattress.....	1	Coachmen.....	27
Pattern.....	6	Coal and Wood Dealers.....	4
Piano.....	2	Dry Goods.....	3

TABLE XCIV.—Continued.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number
Fish and Oyster Dealers	2	Enamelers.....	2
Furniture.....	2	Engineers and Firemen.....	75
Grain.....	1	Engravers.....	9
Hardware.....	2	Expressmen.....	11
Horse.....	2	Farmers.....	120
Ice.....	2	File Cutters and Grinders.....	18
Junk.....	2	File Forgers.....	1
Liquor.....	13	Finishers.....	8
Lumber.....	4	Fire Company Members.....	7
News.....	2	Fishermen and Oystermen.....	13
Oil.....	1	Florists.....	5
Paper.....	2	Folders.....	9
Provision.....	3	Foundrymen.....	6
Shoe.....	5	Fruiterers.....	5
Spring Water.....	1	Furriers.....	1
Collectors.....	3	Gardeners.....	18
Combers.....	3	Gasfitters.....	4
Commercial Travelers.....	29	Glass Workers.....	2
Compositors.....	2	Grocers.....	40
Conductors and Motormen.....	52	Hostlers.....	12
Confectioners.....	1	Hotels and Inn Keepers.....	5
Contractors and Builders.....	8	Saloon and Restaurant.....	11
Cooks and Cutlers.....	17	Ice-men.....	10
Coopers.....	3	Inspectors.....	6
Coppersmiths.....	1	Insurance Agents.....	12
Cutters.....	7	Real Estate.....	5
Decorators.....	3	Iron Workers.....	3
Dentists.....	5	Brass.....	2
Designers.....	6	Steel.....	1
Die Sinkers.....	1	Janitors.....	10
Draughtsmen.....	7	Jewelers.....	112
Drivers.....	17	Jobbers.....	3
Druggists and Apothecaries.....	23	Journalists (Editors and Reporters)....	8
Dyers.....	18	Knitters.....	6
Electrical Engineers.....	5	Laborers.....	377
Electricians.....	27	Lamp-lighters.....	2
Electric Light Trimmers.....	1	Lapidaries.....	3

TABLE XCIV.—Continued.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Lathers	3	Plumbers	30
Laundrymen	9	Polishers.....	17
Lawyers.....	11	Silver.....	4
Life Saving Service Men	5	Pork and Meat Cutters and Pork Packers	9
Linemen.....	7	Porters	12
Liverymen.....	3	Pressmen.....	2
Longshoremen	2	Printers.....	23
Loom Fixers.....	21	Public Officers.....	6
Lumbermen.....	1	Publishers.....	2
Machinists.....	229	Pursers.....	2
Mail Carriers.....	11	Railroad Employees.....	13
Managers	15	Ranchers	1
Manufacturers	25	Rattan Workers.....	1
Masons	20	Refiners, Gold.....	3
Mechanics	22	Riggers	2
Melters (Iron).....	2	Roll Coverers.....	4
Merchants... ..	30	Roofers.....	1
Messengers.....	3	Rubber Workers.....	31
Milkmen.....	11	Sailors.....	18
Millers... ..	1	U. S. Navy.....	7
Miners.....	4	Sea Captains and Ship Masters.....	3
Missionaries.....	1	Secretaries	2
Moulders	30	Servants.....	1
Musicians.....	14	Sextons.....	1
Nurses.....	5	Sheriffs, Constables, and Policemen...	6
Operatives.....	244	Silversmiths.....	24
Opticians.....	2	Soldiers.....	6
Painters and Glaziers	65	Spinners.....	43
Painters, Carriage.....	2	Stable Keepers	5
Paper Hangers.....	3	Stampers	1
Pearl Workers.....	3	Stationers.....	1
Peddlers.....	19	Steam Pipers.....	9
Photographers and Lithographers.....	3	Stevedores.....	2
Physicians.....	22	Stewards	3
Piano Tuners.....	3	Stone Cutters and Marble Workers.....	12
Plasterers and Stucco Workers.....	5	Store Keepers	4
Platers.....	4	Students.....	11

TABLE XCIV.—Concluded.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Superintendents and Overseers.....	51	Upholsterers.....	5
Surveyors of Highway.....	1	Veterinary Surgeons.....	1
Surveyors of Lumber.....	2	Waiters.....	20
Switchmen and Gatemen.....	1	Watchmen.....	6
Tailors.....	20	Weavers.....	201
Teachers and Professors.....	9	Well Drivers.....	1
Teamsters.....	108	Wire Workers.....	4
Telegraph Operators.....	4	Wood Sawyers.....	4
Tinsmiths.....	10	Wood Turners.....	7
Tobacconists.....	1	Wood Workers.....	2
Treasurers.....	2	Wool Sorters.....	10
Undertakers.....	4		

TABLE XCV.

*Occupations and Ages of Decedents, from June 1, 1852, to January 1, 1902, comprising a period of forty-nine years and seven months.
Alphabetically arranged.*

(OCCUPATIONS UNDER TEN, AND AGES UNDER TWENTY, EXCLUDED.)

OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
MALES.				MALES.			
Actors.....	16	544	34.00	Pump and Block Makers.....	14	788	55.71
Agents.....	300	15,960	53.20	Rope.....	25	1,672	66.88
Architects.....	19	1,066	56.10	Sail.....	39	2,290	58.72
Artists.....	44	2,328	52.91	Sash and Blind.....	10	502	50.20
Bakers.....	190	12,165	64.03	Shoe.....	670	38,879	58.03
Bankers and Brokers.....	177	10,615	59.97	Tool.....	45	2,376	52.80
Bank Officers.....	71	4,565	64.30	Watch and Clock.....	44	2,460	55.91
Barbers.....	298	10,570	35.47	Blacksmiths and Farriers.....	790	43,218	54.71
Bartenders.....	56	2,012	35.93	Bleachers and Fullers.....	76	3,796	49.94
Belt Makers.....	13	760	58.46	Boatmen.....	34	1,888	55.53
Boiler.....	88	3,748	42.59	Boat Builders.....	32	1,969	62.47
Box.....	21	1,149	47.88	Bookbinders.....	28	1,304	46.57
Broom and Brush.....	16	813	50.81	Bookkeepers.....	470	21,447	45.63
Cabinet.....	149	8,761	58.79	Bottlers.....	10	390	36.00
Carriage and Trimmers.....	79	4,403	55.76	Brakemen.....	142	4,261	30.01
Cigar.....	113	5,254	46.49	Brewers.....	24	1,175	48.96
Harness.....	142	7,200	50.70	Brick and Stone Layers.....	14	663	47.36
Pattern.....	89	5,291	59.44	Butchers and Marketmen.....	331	17,144	51.79

TABLE XCV.—Continued.

OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
MALES.							
Calico Printers.....	59	3,243	54.96	Contractors and Builders.....	138	8,273	59.95
Calkers.....	15	1,033	68.87	Cooks and Caterers.....	140	6,831	48.79
Carpenters.....	16	861	46.62	Coopers.....	134	8,856	66.09
Carpenters and Joiners.....	2,421	136,265	56.28	Coppersmiths.....	16	969	60.56
Chasers.....	20	775	38.75	Decorators.....	14	526	37.37
Civil Engineers.....	54	2,673	49.50	Dentists.....	56	2,967	52.98
Clerks and Salesmen.....	1,494	56,488	37.81	Designers.....	25	1,305	52.20
Clergymen.....	288	18,429	63.49	Die Shakers.....	24	1,138	47.41
Clothiers.....	17	959	56.41	Draughtsmen.....	16	551	31.41
Coachmen.....	219	9,753	44.53	Drivers, Cab, etc.....	117	4,785	40.89
Coal and Wood Dealers.....	16	965	51.52	Car Conductors and Motormen.....	70	2,891	41.30
Fish and Oyster.....	31	1,872	59.74	Druggists and Apothecaries.....	133	9,239	69.46
Junk.....	19	1,079	56.79	Dyers.....	159	8,117	51.05
Liquor.....	139	6,485	46.65	Electricians.....	28	1,001	35.75
Lumber.....	18	1,004	55.55	Engineers and Firemen.....	531	26,495	49.90
Provision.....	23	1,366	56.71	Engravers.....	154	7,595	49.32
Shoe.....	14	757	51.07	Expressmen.....	113	5,745	50.84
Collectors.....	36	1,491	55.31	Farmers.....	7,358	493,030	67.09
Commercial Travelers.....	34	1,559	45.85	Finishers.....	30	1,493	48.77
Confectioners.....	52	2,424	46.62	File Cutters.....	106	4,352	41.06

TABLE XCIV.—Continued.

OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
MALES.							
Nail Cutters.....	12	490	40.83	Jewelers.....	1,374	53,947	42.31
Fishermen and Oystermen.....	283	15,324	53.80	Journalists (Editors and Reporters).....	55	2,566	46.65
Florists.....	66	3,654	55.36	Judges and Justices.....	18	1,156	64.22
Founders.....	22	1,079	49.05	Laborers.....	11,581	570,875	49.29
Foundrymen.....	24	1,273	53.04	Lamplighters.....	21	1,152	54.86
Gardeners.....	367	21,843	59.52	Lapidaries.....	12	490	35.83
Gas Fitters.....	65	2,830	43.54	Laundrymen.....	25	1,083	43.32
Gilders.....	12	535	44.58	Lawyers.....	209	12,024	57.53
Grocers.....	507	27,586	54.41	Linenen.....	14	629	44.93
Gun and Locksmiths.....	28	1,525	54.46	Machinists.....	1,865	91,245	48.92
Hatters.....	27	1,473	54.56	Mail Carriers.....	12	530	44.17
Hostlers.....	171	7,332	42.88	Manufacturers.....	703	42,948	61.09
Hotel and Inn Keepers.....	185	10,213	55.21	Mariners.....	530	26,436	49.88
Saloon and Restaurant.....	214	9,827	45.92	Masons.....	1,001	56,191	56.14
Stable.....	81	4,433	54.73	Mechanics.....	517	27,374	52.95
Store.....	69	3,695	53.55	Melters.....	12	667	55.58
Inspectors.....	24	1,205	50.21	Merchants.....	1,439	88,239	57.85
Inventors.....	16	1,054	65.87	Milkmen.....	23	854	37.13
Iron Rollers and Workers.....	21	1,006	47.90	Millers.....	53	3,084	58.19
Janitors.....	119	6,449	54.19	Millwrights.....	40	2,718	67.95

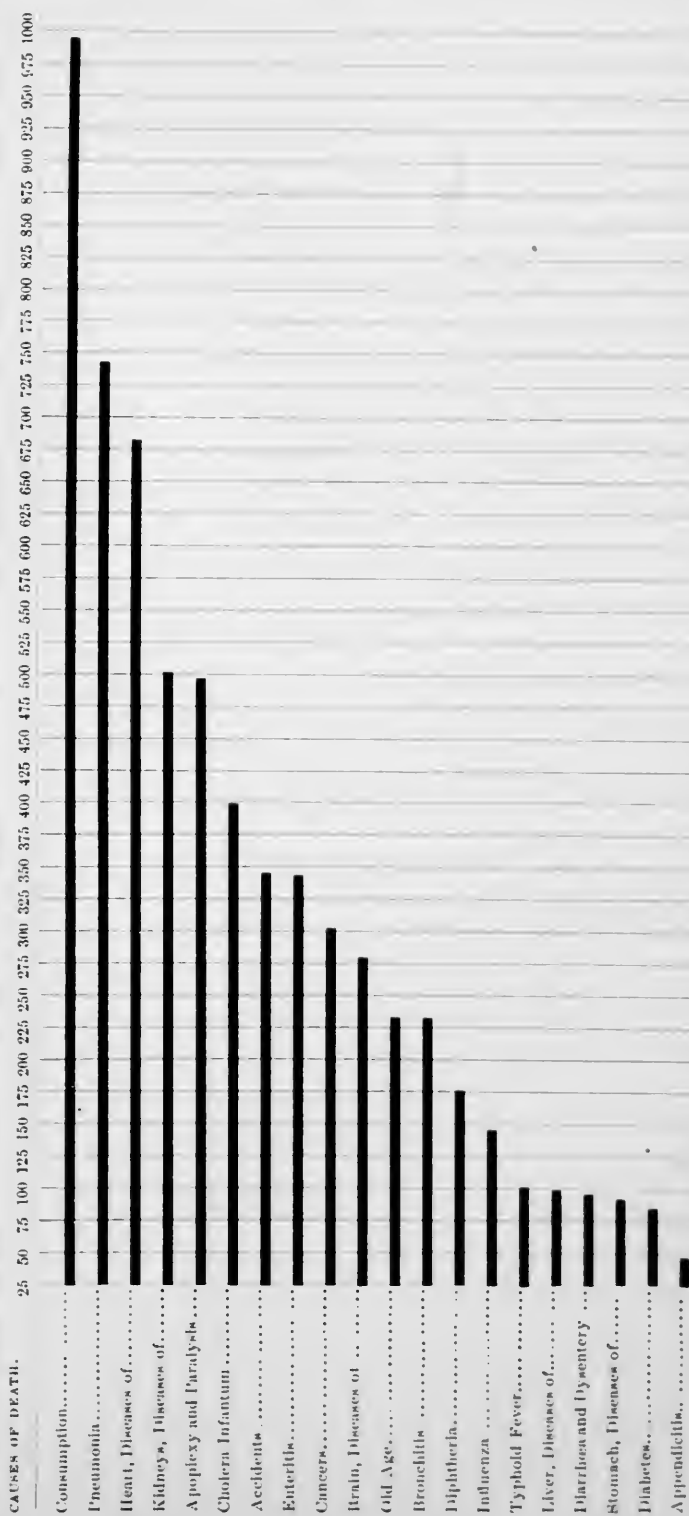
TABLE XCV.—Continued.

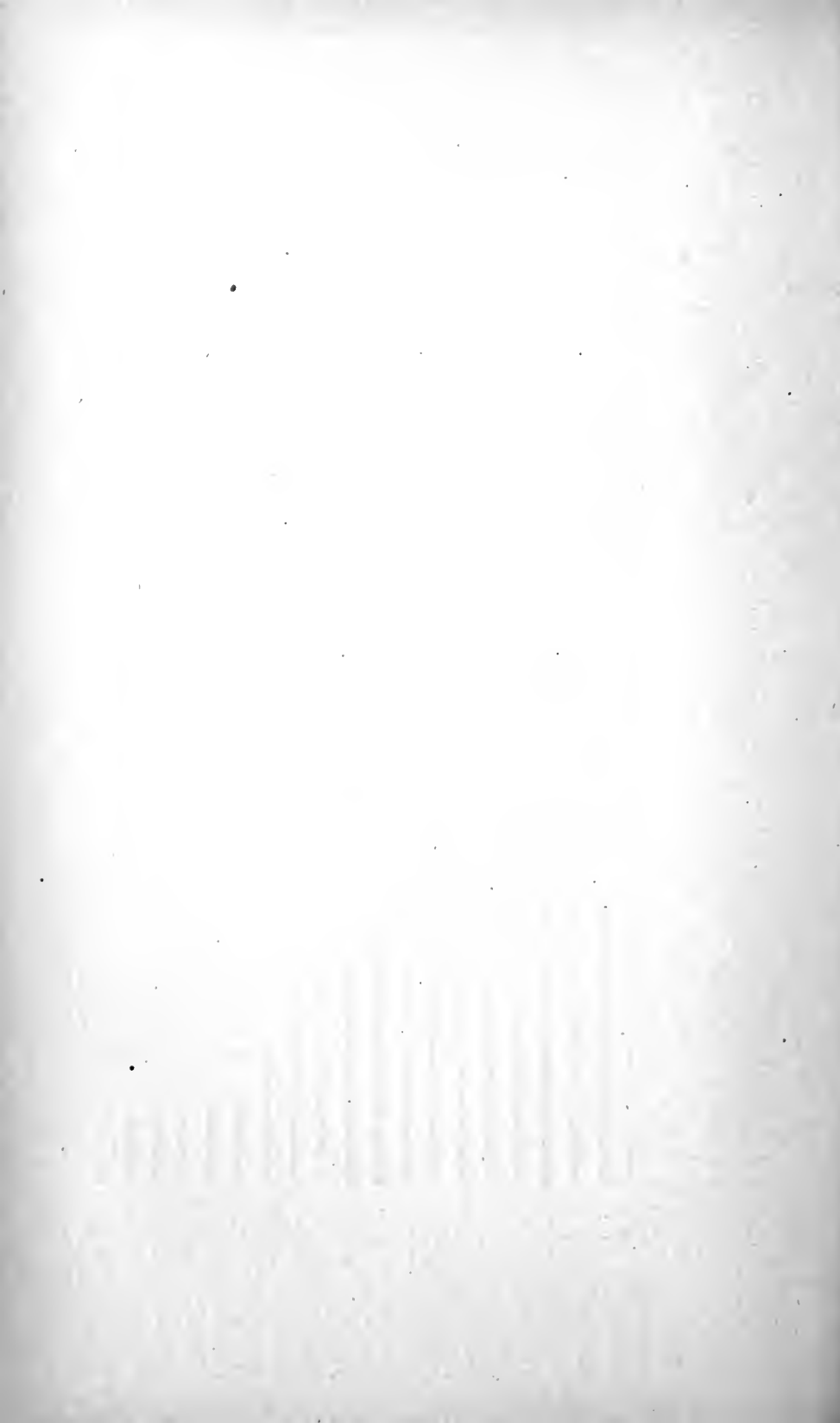
OCCUPATIONS.		Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.		Total Mortality.	Aggregate Ages.	Average Age.
MALES.					MALES.				
Miners	18	1,018	56.55	47.40	Railroad Officials.....	106	5,024	47.40	
Moulders	388	21,101	54.36	46.33	Refiners	18	834	46.33	
Musicians.....	86	4,057	47.17	53.72	Riggers	25	1,313	53.72	
Naval Officers.....	20	965	48.30	57.26	Roll Covers.....	31	1,917	57.26	
Nurses.....	19	1,022	53.79	42.25	Rubber Workers.....	209	8,830	42.25	
Operatives	2,840	125,335	44.13	48.54	Sailors	333	16,164	48.54	
Painters and Glaziers	1,103	51,159	49.10	71.32	Sea Captains	208	14,835	71.32	
Paperhangers	25	1,314	52.56	44.07	Servants.....	30	1,322	44.07	
Peddlers	209	10,518	50.32	62.54	Sextons.....	13	813	62.54	
Photographers and Lithographers.....	32	1,493	46.65	51.33	Sheriffs and Policemen.....	152	8,358	51.33	
Physicians.....	361	21,497	59.55	63.07	Ship Carpenters	86	5,940	63.07	
Plots	24	1,336	55.67	45.71	Silversmiths	117	6,719	45.71	
Plasterers and Stuccoworkers.....	63	3,031	48.11	31.01	Soldiers	158	4,901	31.01	
Platers.....	14	863	57.36	38.11	Steamfitters.....	18	686	38.11	
Plumbers.....	125	4,860	39.12	47.42	Stevedores	19	901	47.42	
Polishers.....	52	2,365	45.48	47.43	Stewards	28	1,318	47.43	
Pork and Meat Cutters and Pork Packers.....	25	1,132	45.28	49.40	Stonecutters and Marbleworkers.....	336	16,106	49.40	
Porters.....	55	2,611	46.62	22.88	Students	90	2,059	22.88	
Printers	284	12,730	56.83	56.08	Superintendents and Overseers.....	423	23,720	56.08	
Public Officers	101	6,036	59.76	56.47	Switchmen, Gate-men, etc.....	30	1,594	56.47	

TABLE XCV.—Concluded.

OCCUPATIONS.		Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.		Total Mortality.	Aggregate Ages.	Average Age.
MALES.					FEMALES.				
Tailors.....	471	26,194	55.61		Boarding-house Keepers.....		27	1,677	62.11
Tanners and Carriers.....	62	3,959	63.85		Bookkeepers.....		23	709	30.83
Teachers and Professors.....	156	7,879	50.50		Clerks and Saleswomen.....		56	1,618	28.89
Teamsters.....	765	35,831	46.84		Cooks.....		63	3,345	53.10
Telegraph and Telephone Operators.....	27	813	30.11		Dressmakers and Seamstresses.....		415	16,916	40.76
Tinsmiths.....	156	7,549	48.39		Jewelers.....		23	648	28.17
Tobaccoists.....	17	977	57.47		Laboring.....		16	699	43.69
Traders.....	283	14,259	50.39		Laundresses.....		53	2,641	49.83
Tradesmen, General.....	185	8,919	48.21		Milliners.....		65	2,346	36.09
Treasurers.....	12	641	53.42		Nurses.....		139	7,991	57.49
Undertakers.....	58	3,317	57.02		Operatives.....		1,165	37,357	32.07
Upholsterers.....	64	2,673	41.77		Physicians.....		11	647	58.82
Waiters.....	137	5,543	40.46		Rubber Workers.....		24	698	29.08
Watchmen.....	209	11,994	57.39		Servants.....		602	28,659	47.61
Weavers.....	38	1,856	48.84		Sisters of Mercy.....		39	1,578	40.46
Wheelwrights.....	120	7,218	60.15		Tailoresses.....		152	7,120	46.84
Wire Workers.....	16	685	42.88		Teachers.....		266	13,348	50.18
Wood Turners.....	60	2,622	43.70		Telegraph and Telephone Operators.....		10	299	29.90
Wool Sorters.....	71	3,475	48.94		Waitresses.....		12	341	28.42
Total.....	51,891	2,739,176	52.79		Total.....		3,161	138,637	40.70
					Grand Total.....		55,052	2,807,813	52.09

Diagram III. Exhibiting the comparative mortality by absolute number of decedents, from twenty principal causes of death in Rhode Island, in 1901.





THE RETURNS OF THE MEDICAL EXAMINERS.

The number of deaths investigated by the medical examiners during the year 1901 was 541. These deaths resulted from sudden, suspicious, unknown, and violent causes. Of this number 408, or 75.4 per cent., were males; and 133, or 24.6 per cent., were females.

HOMICIDE.—The number of deaths from homicide was 6, or 1.1 per cent. of the whole number investigated. Of the 6 cases of homicide, 1 was by pistol-shot in the intestines, 1 by pistol-shot in heart, 1 by bullet-wound in head, 1 by contusions of head by being struck by bottle, and 2 by illuminating gas. In one case the assailant was brought to trial, convicted, and sentenced; in three instances the assailants committed suicide.

SUICIDE.—The number of deaths by suicide reported by the medical examiners in 1901 was 55, or 10.2 per cent. of the whole number examined. Death was caused as follows: by drowning, 10; hanging, 13; shooting, 13; illuminating gas, 5; incised wound of throat, 3; inhalation of chloroform, 1; by carbolic acid, 5; morphine, 1; "rough on rats," 1; paris green, 3.

ACCIDENTS.—The returns of the medical examiners show 276 deaths from accidents, specified as follows: asphyxia, 26; burns and scalds, 27; drowning, 59; falls, 46; poison, 6; by chloroform during surgical operation, 2; electric car, 10; electrical shock and burns, 3; elevator, 4; explosion of steam cylinder, 2; railroad, 29; bicycle, 4; firearms, 5; machinery, 1; heat, 13; exposure to cold and storm, 11; run over by heavy teams, 5; thrown from teams, 5; run over by (runaway) horse, 1; kicked by horse, 1; crushed by falling stone, 2; 1 each, crushed by falling pile of horse shoes; crushed while working on stone crusher; crushed between cart and wall; crushed by falling box; struck by derrick; struck by falling plank; rupture of intestines by falling (beer) barrel; caught in window, unable to move either way, died of exhaustion; fractured vertebræ by jumping from car to avoid "head-on" collision; severed artery (femoral), hemorrhage; by penetrating wound, at base of brain, made by pointed wire thrown

by companion while "fooling"; by stone falling on head during hypnotic performance at theatre; and 2 by fractured skull, manner unknown.

ASPHYXIA, 26.—By bed-clothes and overlaying, 11; at birth (mother unattended), 1; by illuminating gas, 8; by smoke in burning building, 1; by hot air, "large volumes of gas burning in room and alcoholism," 1; by incomplete combustion of oil-stove, 1; in coal-pocket by soft coal, 1; strangulation by food in air passages, 2.

BURNS AND SCALDS, 27.—By bonfire, 4; by explosion of dynamite, 1; explosion of powder while making fireworks, 1; explosion of oil-stove, 1; playing with matches, 2; by upset kerosene lamp, 1; lighting fire with kerosene, 1; by clothes taking fire from stove, 6; by clothes taking fire from plumber's furnace, 1; by upsetting or falling into hot water or other liquids, 7; source unknown, 2.

DROWNING, 59.—Bathing or swimming, 15; through ice, 9; overboard from boats, 4; by capsizing of boats, 6; from wharf, 1; from rock while fishing, 1; by falling into water while playing on edge, 2; by bursting of dam (swept away), 1; 20 were found in water, circumstances of the drowning unknown.

FALLS, 46.—From building or staging, 12; downstairs, 5; on ground or floor, 9; on curbing, 2; on ice, 2; on rocks, 1; into hold of vessel, 2; from teams, 4; down chute, 1; into cellar, 1; into coal-pocket, 1; against stone in well, 1; from railroad bridge, 1; from window, 2; from wheelhouse to deck of vessel, 1; unspecified, 1.

POISON, 6.—One each, by overdose of chloral; overdose of cough mixture; oxalic acid taken for epsom salts; strychnine tablets mistaken for candy; toothache drops taken by child from shelf; and by drinking wood alcohol.

The whole number of deaths by accident in the State during 1901 was 346, showing that there were 70 deaths by accident where no medical examiner was called. In these cases a physician had been in attendance and had reported the cause of death. In many instances the death was not immediate. The division of these 346 deaths by accident was as follows (see page 188 of this report): asphyxia, 33; bicycle, 4; burns and scalds, 36; drowning, 57; electric car, 11; by electrical shock, 3; elevator, 4; exposure

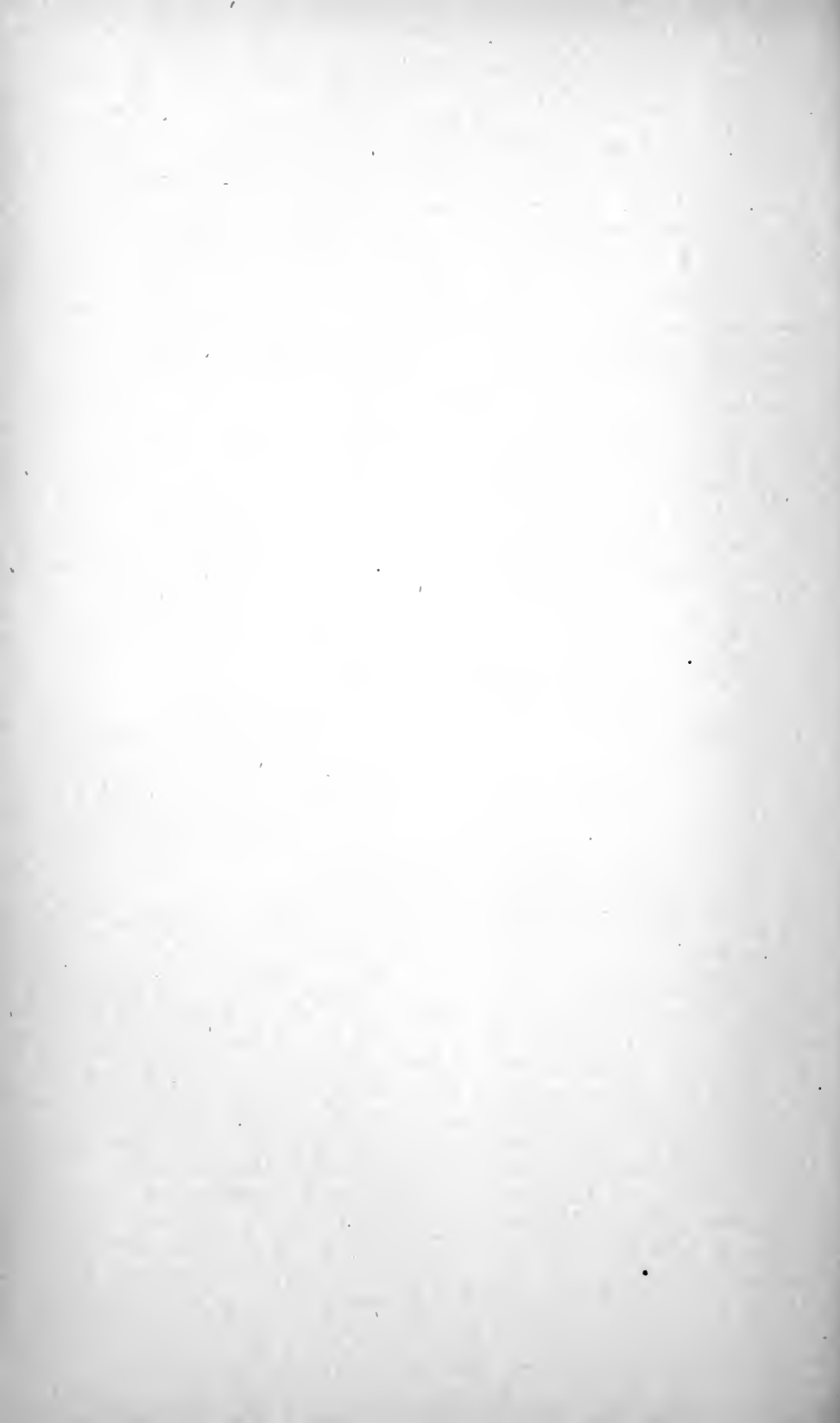
to cold and storm, 14; falls, 61; firearms, 5; insolation, 37; poison, 6; railroad, 33; various, 42.

A comparison of these figures with the cases of accidents which are viewed by medical examiners will show the cases which are more open to suspicion of avoidable violence. The difference (15) is more marked under the cause of falls.

Under sudden deaths which were investigated by medical examiners were, alcoholism, 18; angina pectoris, 2; apoplexy and cerebral hemorrhage, 9; bronchitis, 1; cancer of breast, 3; cancer of stomach, 1; childbirth (hemorrhage), 1; cholera infantum, 2; chronic diarrhoea, 1; cirrhosis of liver, 1; infantile convulsions, 1; diabetes, 3; enteritis, 6; entero colitis, 1; epilepsy, 4; disease of heart, 59; strangulated hernia, 1; acute indigestion, 4; influenza, 2; ischio-rectal abscess, 1; malarial poison, 2; malassimilation or malnutrition, 4; membranous croup, 1; malformation, cleft palate, sudden death, 1; open foramen ovale, 2; nephritis, or Bright's disease, 18; œdema of lungs, 1; old age, 4; pelvic abscess, 1; pneumonia, 8; pulmonary congestion, 1; pulmonary apoplexy, 1; septicæmia following criminal abortion, 3; tubercular meningitis, 1; tuberculosis, pulmonary, 12; tuberculosis, pulmonary, with hemorrhage, 5; sudden death, cause unknown, 7; neglect at birth, (supposed infanticides, 3 found in water, 1 in vault), 4; premature birth, 4; there were also 3 still-births.

Number and Per Cent. of Each Group of Cases Viewed by Medical Examiners.—1894-1901.

YEARS.	Homicide.		Suicide.		Accident or Negligence.		Natural and Unknown Causes, Including Alcohol- ism.		Total.
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	
1894.....	9	3.1	45	15.6	141	49.0	93	32.3	288
1895.....	6	1.7	31	8.5	223	61.4	103	28.4	363
1896.....	1	0.3	27	8.3	177	54.3	121	37.1	326
1897.....	12	3.4	32	9.2	157	45.1	117	42.3	318
1898.....	12	3.1	41	10.7	203	54.0	127	33.2	383
1899.....	15	3.2	33	8.4	214	45.8	199	42.6	467
1900.....	15	2.8	59	11.2	258	48.8	197	37.2	529
1901.....	6	1.1	55	10.2	276	51.0	204	37.7	541



THE INTERNATIONAL CLASSIFICATION OF CAUSES OF DEATH.

Adopted by the United States Census Office for the Compilation of Mortality Statistics, for use beginning with the year 1900.

DETAILED CLASSIFICATION.

ALL CAUSES (STILL-BIRTHS EXCLUDED).

I.

General Diseases.

(A. Epidemic Diseases.)

1. Typhoid Fever (Abdominal Typhus).
2. Exanthematic Typhus.
3. Relapsing Fever.
4. Intermittent Fever and Malarial Cachexia.
5. *Repeated. Malarial Cachexia.*
6. Smallpox.
7. Measles.
8. Scarlet Fever.
9. Whooping Cough.
10. Diphtheria and Croup.
11. *Repeated. Diphtheria.*
12. Influenza.
13. Miliary Fever.
14. Asiatic Cholera.
15. Cholera Nostris.
16. Dysentery.
17. *Repeated. Epidemic Dysentery.*
18. Bubonic Plague.
19. Yellow Fever.
20. Leprosy.
21. Erysipelas.
22. Other Epidemic Diseases.

(B. Other General Diseases.)

23. Purulent Infection and Septicæmia.
24. Glanders and Farcy.
25. Malignant Pustule.
26. Rabies.
27. Actinomycosis, Trichinosis, etc.
28. Pellagra.

29. Tuberculosis of the Lungs.
30. Tuberculosis of the Larynx.
31. Tuberculosis of the Meninges.
32. Abdominal Tuberculosis.
33. Pott's Disease.
34. Cold Abscess, Abscess by Congestion.
35. White Swelling.
36. Tuberculosis of Other Organs.
37. General Tuberculosis.
38. Scrofula.
39. Syphilis.
40. Gonorrhea (5 years and over).
41. Gonorrhea (under 5 years).
42. Cancer and Other Malignant Tumors of the Buccal Cavity.
43. Cancer and Other Malignant Tumors of the Stomach and Liver.
44. Cancer and Other Malignant Tumors of the Peritoneum, Intestines, and Rectum.
45. Cancer and Other Malignant Tumors of the Female Genital Organs.
46. Cancer and Other Malignant Tumors of the Breast.
47. Cancer and Other Malignant Tumors of the Skin.
48. Cancer and Other Malignant Tumors of Other Organs, or of Organs not Specified.
49. Other Tumors (tumors of the Female Genital Organs excepted).
50. Acute Articular Rheumatism.
51. Chronic Rheumatism and Gout.
52. Scurvy.
53. Diabetes.
54. Exophthalmic Goitre.
55. Addison's Disease.
56. Leukæmia.
57. Anæmia, Chlorosis.
58. Acute and Chronic Alcoholism.

- { 57. Chronic Lead Poisoning.
- 58. Other Chronic Poisonings (occupational).
- { 59. Other Chronic Poisonings.
- 55. Other General Diseases.

II.

Diseases of the Nervous System and Organs of Special Sense.

- 60. Encephalitis.
- 61. Simple Meningitis.
- 61. *Repeated. Epidemic Cerebro-spinal Meningitis.*
- 62. Progressive Locomotor Ataxia.
- 63. Other Diseases of the Spinal Cord.
- 64. Congestion and Hemorrhage of the Brain.
- 65. Softening of the Brain.
- 66. Paralysis Without Specified Cause.
- 67. General Paralysis.
- 68. Other Forms of mental Alienation.
- 69. Epilepsy.
- { 70. Convulsions (Non-Puerperal; 5 years and over).
- { 71. Convulsions (under 5 years).
- 72. Tetanus.
- { 73. Chorea.
- { 74. Other Diseases of the Nervous System.
- { 75. Diseases of the Eye and its Adnexa.
- { 76. Diseases of the Ear.

III.

Diseases of the Circulatory System.

- 77. Pericarditis.
- 78. Acute Endocarditis.
- 79. Organic Diseases of the Heart.
- 80. Angina Pectoris.
- 81. Diseases of the Arteries, Atheroma, Aneurism, etc.
- 82. Embolism and Thrombosis.
- 83. Diseases of the Veins (Varices, Hemorrhoids, Phlebitis, etc.).
- 84. Diseases of the Lymphatic System (Lymphangitis, etc.).
- { 85. Hemorrhages.
- { 86. Other Diseases of the Circulatory System.

IV.

Diseases of the Respiratory System.

- 87. Diseases of the Nasal Fossa.
- 88. Diseases of the Larynx.
- 89. Diseases of the Thyroid Body.
- 90. Acute Bronchitis.
- 91. Chronic Bronchitis.
- 92. Broncho-pneumonia.
- 93. Pneumonia.
- 94. Pleurisy.
- 95. Congestion and Apoplexy of the Lungs.
- 96. Gangrene of the Lungs.
- { 97. Asthma.
- { 98. Pulmonary Emphysema.
- { 99. Other Diseases of the Respiratory System (Phthisis excepted).

V.

Diseases of the Digestive System.

- 100. Diseases of the Mouth and its Adnexa.
- { 101. Diseases of the Pharynx.
- { 102. Diseases of the Oesophagus.
- 103. Ulcer of the Stomach.

- 104. Other Diseases of the Stomach (Cancer excepted).
- 105. Diarrhoea and Enteritis (under 2 years).
- 105. *Repeated. Chronic Diarrhoea and Enteritis (under 2 years).*
- 106. Diarrhoea and Enteritis (2 years and over).
- 107. Intestinal Parasites.
- 108. Hernia and Intestinal Obstructions.
- 109. Other Diseases of the Intestines.
- 110. Acute Yellow Atrophy of Liver.
- 111. Hydatid Tumors of the Liver.
- 112. Cirrhosis of the Liver.
- 113. Biliary Calculi.
- 114. Other Diseases of the Liver.
- 115. Diseases of the Spleen.
- 116. Simple Peritonitis (Non-puerperal).
- 118. Appendicitis and Abscess of the Iliac Fossa.
- 117. Other Diseases of the Digestive System (Cancer and Tuberculosis excepted).

VI.

Diseases of the Genito-Urinary System and its Adnexa.

- 119. Acute Nephritis.
- 120. Bright's Disease.
- 121. Other Diseases of the Kidneys and their Adnexa.
- 122. Calculi of the Urinary Tract.
- 123. Diseases of the Bladder.
- 124. Diseases of the Urethra, Urinary Abscess, etc.
- 125. Diseases of the Prostate.
- 126. Non-venereal Diseases of the Male Genital Organs.
- 127. Metritis.
- 128. Uterine Hemorrhage (Non-puerperal).
- 129. Uterine Tumor (Non-cancerous).
- 130. Other Diseases of the Uterus.
- 131. Cysts and Other Tumors of the Ovary.
- 132. Other Diseases of the Female Genital Organs.
- 133. Non-puerperal Diseases of the Breast (Cancer excepted).

VII.

The Puerperal State.

- 134. Accidents of Pregnancy.
- 135. Puerperal Hemorrhage.
- 136. Other Accidents of Labor.
- 137. Puerperal Septicæmia.
- 138. Puerperal Albuminuria and Convulsions.
- 139. Phlegmasia Alba Dolens (Puerperal).
- 140. Other Puerperal Accidents — Sudden Death.
- 141. Puerperal Diseases of the Breast.

VIII.

Diseases of the Skin and Cellular Tissue.

- 142. Gangrene.
- 143. Furuncle.
- 144. Acute Abscess, Phlegmon.
- 145. Other Diseases of the Skin and its Adnexa.

IX.

Diseases of the Organs of Locomotion.

- 146. Non-tuberculous Diseases of the Bones.

147. Arthritis and Other Diseases of the Joints (Tuberculosis and Rheumatism excepted).

{ 148. Amputation.

{ 149. Other Diseases of the Organs of Locomotion.

X.

Malformations.

150. Congenital Malformations (Stillbirths excluded).

XI.

Early Infancy.

{ 151. Congenital Debility, Icterus and Sclerema.

{ 152. Other Diseases Peculiar to Early Infancy.

{ 153. Lack of Care.

XII.

Old Age.

154. Senile Debility.

XIII.

External Causes.

- { 155. Suicide by Poison.
- { 156. Suicide by Asphyxia.
- { 157. Suicide by Hanging or Strangulation.
- { 158. Suicide by Drowning.
- { 159. Suicide by Firearms.
- { 160. Suicide by Cutting Instruments.
- { 161. Suicide by Jumping from High Places.
- { 162. Suicide by Crushing.
- { 163. Other Suicides.
- { 164. Fractures.
- { 165. Dislocations.
- { 167. Burns and Scalds.
- { 168. Burns from Corrosive Substances.
- { 169. Sunstroke.
- { 170. Freezing.
- { 171. Electric Shock.
- { 172. Accidental Drowning.
- { 173. Inanition (Starvation).
- { 174. Absorption of Deleterious Gases (Non-Suicidal).
- { 175. Other Acute Poisonings.
- { 166. Other Accidental Traumatism.
- { 176. Other External Violence.

XIV.

Ill-Defined Diseases.

- { 177. Dropsy.
- { 178. Sudden Death.
- { 179. Causes of Death Unspecified or Ill defined.

APPENDIX B.

THE LAWS OF RHODE ISLAND

(As amended February 1, 1896.)

IN RELATION TO THE REGISTRATION OF

BIRTHS, MARRIAGES, AND DEATHS, AND OF DIVORCE.

GENERAL LAWS, CHAPTER 100.

OF THE REGISTRATION OF BIRTHS, MARRIAGES, AND DEATHS.

SECTION 1. The town clerks of the several towns, or any person whom the board of aldermen of any city, or the town council of any town, may appoint for that purpose, shall obtain, chronologically record and index, as required by the forms prescribed by section three of this chapter, all information concerning births, marriages, and deaths occurring among the inhabitants of their respective towns; and on or before the first Monday in March, annually, shall make duly certified returns thereof to the secretary of the state board of health for the year ending on the thirty-first day of December next preceding, accompanying the same with a list of the persons required by law to make returns to them who have neglected to do so, and with such remarks relating to the object of this chapter as they may deem important to communicate.

SEC. 2. The secretary of the state board of health shall receive the returns made in pursuance of the preceding section, and annually make a general abstract and report thereof, in form as prescribed by section three of this chapter, and publish not exceeding one thousand copies thereof; and for preparing, tabulating, and publishing said annual report such sum as may be provided by law shall be paid to the state registrar. Said returns, after such report is prepared, shall be deposited in the office of the secretary of state, who shall cause the same to be arranged, full alphabetical indices of all the names to be made, and the whole to be bound in volumes of convenient size and carefully preserved in his office.

SEC. 3. The blank forms required to carry out the provisions of this chapter shall, on application, be furnished by the secretary of the state board of health to clergymen, physicians, undertakers, town clerks, clerks of meetings of the Society of Friends, and other persons requiring them, substantially as follows: The record of a birth shall state the date and place of birth, name of the child if it has any, the sex and color of the child, whether born alive or still-born, the name and surname, color, residence, and birthplace of the parents, and the occupation of the father, and the time of recording, so far as the same can be ascertained. The record of a marriage shall state the date of the marriage, place, name, residence, and official station of the person by whom married, names and surnames of the parties, age, color, occupation, and residence of each, condition, that is, whether single or widowed, what marriage, that is, whether first, second, third, or other marriage, the occupation, birthplace, and name of their parents, and the time of recording, so far as the same can be ascertained. The record of deaths shall state the date of the death, name and surname of deceased, the sex, color, and condition, whether single or married, age, occupation, place of death, place of birth, names and birthplace of parents, disease or cause of death, and the time of recording, so far as can be ascertained.

SEC. 4. Every meeting of the Society of Friends, clergymen, and all others authorized to join persons in marriage, shall make a faithful record of every such rite performed by them, in manner and form aforesaid, and return the same for the last preceding month, on or before the second Monday of every month, to the town clerk of the town in which such rite shall have been performed; and no marriage shall be solemnized until the parties shall have signed and delivered to the person about to solemnize it, or to a clerk of a meeting of the Society of Friends, a certificate containing the information required for the record of a marriage, as prescribed by this chapter.

SEC. 5. The town clerk of every town shall annually, in the month of January, collect the information required by this chapter, in relation to all children born in the town during the year ending on the thirty-first day of December next preceding.

SEC. 6. Physicians and midwives shall, on or before the fifth day of each month, report to the clerk of each city or town a correct list of all children born therein during the month next preceding, at whose birth they were present, stating the date and place of each birth, the name of the child if it has any, the sex and color of the child, the name, place of birth and residence of the parents, and the occupation of the father. The fee of the physician or midwife shall be twenty-five cents for each birth so reported, and shall be paid by the city or town in which the report is made.

SEC. 7. Whenever any person shall die, or any still-born child shall be brought forth in this state, the physician attending at such bringing forth

or last sickness, if any physician so attended, shall, within forty-eight hours after such death or bringing forth, leave with the family, if any, or person having the care of the deceased, or the person bringing forth such still-born child, or give to the undertaker or person who conducts the funeral, a certificate stating, in case of a death, the name of the deceased, the date of the death, and the disease or cause of the death; and in case of the bringing forth of a still-born child, the date and the cause of such child being brought forth still-born: *Provided, however*, that if the physician last in attendance shall not have knowledge of such death, or is otherwise reasonably prevented from leaving with the family or giving the undertaker such certificate within the time hereinbefore specified, or before the funeral or disposal of the remains of the deceased, he shall, within five days after having knowledge of such death by notification or otherwise, send to the town or city clerk or registrar of the town or city in which such death occurred a certificate, stating the name, date, and disease or cause of death of such decedent.

SEC. 8. Every town council may appoint a sufficient number of persons to act as undertakers, removable at the pleasure of such council.

SEC. 9. No undertaker or other person shall conduct a funeral, or bury or deposit in a tomb, or remove from this state or otherwise dispose of the remains of any deceased person or still-born child, unless he shall first obtain the physician's certificate required by section seven of this chapter, if a physician was in attendance upon such person who has deceased or the person bringing forth such still-born child, and shall return the same, together with his own certificate of the information required by section three of this chapter, to the town clerk of the town where such death or bringing forth took place: *Provided, however*, that in such towns as allow the burial or removal of bodies of deceased persons without a permit from the town clerk, and if the undertaker or other person who has charge of the disposal of the remains of the deceased person is unable to obtain the said physician's certificate, after reasonable attempts therefor, before the burial or removal of the said remains, then the said undertaker or other person shall make his return as required by section three of this chapter, including the cause of death and the name of the physician last in attendance upon the deceased, immediately to the town or city clerk or registrar of the town or city in which the death occurred. He shall, also, within two days thereafter, notify the physician last in attendance upon the deceased person of the name and date of death of the same.

SEC. 10. Clergymen of all denominations who officiate at the funerals of decedents when no undertaker is in attendance shall, when requested by the state registrar, or the town or city clerk or registrar of the town or city in which such deaths occurred, make returns of such deaths in the same manner and with the same compensation as undertakers.

SEC. 11. Any town may make ordinances more effectually to attain the objects herein contemplated.

SEC. 12. The town clerks, or persons appointed as aforesaid, shall receive for each record of a death made and returned as required by law, and for each record of a marriage made and returned as required by law, twenty cents, to be paid to them out of their respective town treasuries : *Provided*, that the yearly compensation to be paid out of the town treasury as aforesaid, to any one town clerk or person appointed as aforesaid, who shall perform the duties prescribed by this chapter, shall not be less than five dollars. Undertakers and others making returns of deaths, as required by sections seven and nine of this chapter, shall receive for each full report of a death made to the town clerk, five cents in the cities of Providence and Newport, and ten cents in the other towns of the state.

SEC. 13. Every clergyman, physician, midwife, undertaker, town clerk, clerk of any meeting of the Society of Friends, or other person who shall willfully or unreasonably neglect or refuse to perform any of the duties imposed on or required of him by this chapter, shall be fined not exceeding twenty dollars nor less than two dollars for each offence; one-half thereof to the use of the town in which the offence shall occur, and one-half thereof to the use of the person who shall complain of the same.

SEC. 14. Every clergyman, physician, coroner, undertaker, medical examiner, or clerk of any meeting of the Society of Friends, shall cause his name, residence, and post-office address to be recorded in the town clerk's office of the town where he resides.

SEC. 15. No letters of administration or letters testamentary shall be granted by any court of probate upon the estate of any person, until the death of such person, or the facts from which the same is presumed, shall be duly certified, as near as may be, to the town clerk, in order that the same may be duly registered according to the provisions of this chapter.

SEC. 16. The town and city clerks, and registrars of the several towns and cities, shall have the custody of all records of births, deaths, and marriages of their respective towns, whether made under the statutes now in force or any former statute, and a certificate signed by them, certifying that any written or printed statement of any marriage, birth, or death is a true copy of the record in their custody, shall be admitted as evidence of such marriage, birth, or death.

SEC. 17. Births, marriages, and death of non-residents shall be distinguished from those of residents in the returns by being arranged separately.

SEC. 18. The secretary of the state board of health may from time to time vary the forms of returns, and require such additional information as he may consider necessary to accomplish the object of this chapter.

SEC. 19. The town clerks or other officers appointed under this chapter to collect, record, and return the births in the several cities and towns, shall receive fees therefor as follows : For making record and return of

these facts as required by law, twenty cents for each entry and return ; to be paid by the city or town in which the birth is recorded.

SEC. 20. The clerk or registrar of each town and city shall, on the first day of each and every month, make a certified copy of all births, marriages, and deaths recorded in the books of said town or city during the previous month, whenever the parents of, the child born, or the bride or the groom, or the deceased person, were resident in any other town or city in this state, or in any other state, at time of said birth, marriage, or death ; and shall transmit such certified copies to the clerk or registrar of the town, city, or state in which such parents of the child born, the bride or the groom, or the deceased, were resident at the time of said birth, marriage, or death, stating, in case of a birth, the name of the street and number of the house, if any, where such parents resided, the place of birth of such parents, and the maiden name of the mother, whenever the same can be ascertained ; and the clerk or registrar so receiving such certified copies shall record the same in the books kept for recording births, marriages, and deaths. Such certified copies shall be made upon blanks to be furnished for that purpose by the secretary of the state board of health.

SEC. 21. The town clerks of the several towns, or other persons appointed under this chapter to collect the births in the several towns, shall annually in the month of January collect the facts concerning the births within their respective towns, required by this chapter, and shall, so far as practicable, at the same time collect the names of all persons liable to be enrolled in the militia, as required by title thirty-four, and the census of all persons between the ages of five and fifteen years inclusive, as provided by chapter fifty-four, and shall receive therefor such compensation as the town council or the board of aldermen of their respective cities shall determine : *Provided*, that the city of Providence shall be exempt from so much of the provisions of this section as relates to the collection of the statistics of births.

SEC. 22. Blanks for the foregoing purposes shall be furnished, on application therefor, on or before the first day of December in the year preceding, by the state board of health for the collection of births, by the adjutant-general for the taking of the enrolled militia, and by the commissioner of public schools for the census aforesaid.

SEC. 23. The person or persons who shall discharge the duties required by section twenty-one of this chapter, if other than the town clerk, shall make full return thereof to the town clerk of his or their town, on or before the tenth day of February next following.

SEC. 24. The returns required to be made by the clerks of the appellate division of the supreme court, in relation to divorcees, to the secretary of the state board of health, or a prepared abstract thereof, shall be published in the annual report of the births, marriages, and deaths in the state.

SYNOPSIS OF THE LAW OF MARRIAGE.

GENERAL LAWS, CHAPTER 191.

SECTIONS 1, 2, and 3 show what kindred persons cannot marry, and declare marriages within prohibited degrees null and void.

SECTION 4 makes an exception in favor of Jews, within the degrees of affinity or consanguinity allowed by their religion.

SECTION 5 declares the marriage of persons having a husband or wife living, and of idiots and lunatics, absolutely void.

SEC. 6. Any minister or elder of any religious denomination who shall be *domiciled* in the state, and shall have *registered* with the town clerk and have received a *license*, may join persons in marriage in this state.

SECTION 7 designates who shall be considered as belonging to a religious denomination within the meaning of the preceding section.

SEC. 8. Wardens in the town of New Shoreham may join persons in marriage in said town.

SECTION 9 designates who may join persons in marriage when solemnized among Quakers, or among persons professing the Jewish religion.

SEC. 10. Persons intending to be joined together in marriage in this state must first obtain a license from the town or city clerk of the town in which they respectively reside, or, if not residents of the state, from the clerk of the town or city in which the marriage is to be solemnized. The license shall contain the information called for so far as the same is known to such persons, each of whom shall subscribe to the truth of the same in the presence of the clerk or an assistant clerk of that town or city in which they respectively reside. For issuing such license the town or city clerk shall be entitled to a fee of one dollar: *Provided*, that when the persons intending to be joined in marriage live in different towns or cities in this state the fee shall be fifty cents in each town or city. Such license shall be presented to the minister, elder, justice, warden, or other person who performs the marriage ceremony.

SECTION 11 provides for the control of marriages of minors, and requires the written consent of the parent or guardian before the information provided for in section ten can be given. Persons over eighteen years of age, however, who may have no parent or guardian, may make oath relative to that fact to the city or town clerk, and may then give the required information called for in the application.

SECTION 12 requires that *each* of the persons married must present to the officiating clergyman a certified copy, as provided in section ten. These

must also be signed by the respective parties to the marriage in the presence of the clergyman. This is intended to identify the parties as being the same who appeared for the certificate from the town clerk.

SECTION 13 requires that the officiating clergyman shall endorse the certificate stating that he has joined the parties in marriage, and also that two witnesses of the marriage shall append their signatures. It also provides that the minister shall make a return of the certificate to the town clerk on or before the second Monday of the month succeeding the date of the marriage.

SECTION 14 provides for the care and preservation of the records.

SECTION 15 provides for the work of registration in the city of Providence to be done by the city registrar.

SECTION 16 provides for the recording of the returned certificates in the office of the town clerk, and the final lodgment of the certificates with the secretary of state. These are there to be properly indexed, and open to inspection only in the presence of some one connected with the office of the secretary of state.

SECTION 17 provides that two witnesses shall be present at the marriage ceremony.

SECTION 18 provides that lawful objection to a marriage shall be made in writing, and the officiating clergyman shall not proceed with the marriage until the objection is removed.

SECTION 19 provides for a penalty of six months imprisonment, or a fine of one thousand dollars, for joining persons in marriage without first having been presented with the certified copies required in section ten, or without having first returned any lawful objection to the marriage.

SECTION 20 provides for a penalty a fine of not exceeding one hundred dollars, for failure to perform any of the duties devolving upon the officiating officer under this chapter.

SECTION 21 provides for a fine for joining persons in marriage who have a husband or wife living.

SECTION 22 provides that no marriage shall be deemed or adjudged to be void by any failure on the part of the officiating officers to comply with the law, if the marriage is in other respects lawful and has been performed with a full belief on the part of the persons so married, or either of them, that they have been lawfully joined in marriage.

SEC. 23. Every person who shall solemnize a marriage without being legally authorized thereto shall be fined five hundred dollars.

GENERAL LAWS, CHAPTER 195.

OF DIVORCE.

SECTION 1. Divorces from the bond of marriage shall be decreed in case of any marriage originally void or voidable by law, and in case either party is for crime deemed to be or treated as if civilly dead, or from absence or other circumstances may be presumed to be actually dead.

SEC. 2. Divorces shall be decreed for impotency, adultery, extreme cruelty, willful desertion for five years of either of the parties, or for such desertion for a shorter period of time in the discretion of the court, for continued drunkenness, for the habitual, excessive, and intemperate use of opium, morphine, or chloral, for neglect or refusal on the part of the husband, being of sufficient ability, to provide necessities for the subsistence of his wife, and for any other gross misbehavior and wickedness in either of the parties repugnant to and in violation of the marriage covenant.

SEC. 3. Whenever in the trial of any petition for divorce from the bond of marriage it shall be alleged in the petition that the parties have lived separate and apart from each other for the space of at least ten years, the court may in its discretion enter a decree divorcing the parties from the bond of marriage, and may make provisions for alimony.

SEC. 4. Whenever it shall appear that the absence, adultery, cruelty, desertion, or other cause of complaint as aforesaid was committed or occasioned by the collusion of the parties, and done and contrived with an intention to procure a divorce, in such case no divorce shall be decreed.

SEC. 5. Whenever a divorce is granted for fault on the part of the husband, the wife shall have dower as if the husband were dead; but such dower shall be claimed on proceedings begun within six months after the absolute decree, and, if not claimed within said period, or if claim be made for alimony within said period, then dower shall be deemed to be waived and released, and the only relief of the wife shall be a claim for alimony chargeable upon the estate of the husband, or some specific portion thereof as the court may decree: *Provided*, that in case of such divorce between parties married before the Digest of eighteen hundred forty-four went into operation, the wife shall be re-instated in all of her real estate, and have restored to her all of her personal estate not, in either case, disposed of at the date of the filing of the petition for said divorce.

SEC. 6. Whenever a divorce is granted for fault on the part of the wife, the husband, if he be entitled to curtesy-initiate, shall have a life estate in all the lands of the wife as if the wife were dead, but subject to such

allowance to the wife, to be charged on such life estate, as the court in the peculiar circumstances of the case may deem just and proper.

SEC. 7. Otherwise than as provided in the two preceding sections neither husband or wife, on divorce being granted, shall have any right in the estate of the other.

SEC. 8. Divorces from bed, board, and further cohabitation, until the parties be reconciled, may be granted for any of the causes for which by law a divorce from the bond of marriage may be decreed, and for such other causes as may seem to require the same. In case of such divorce the court may assign to the petitioner a separate maintenance out of the estate or property of the husband or wife, as the case may be, in such manner and of such amount as it may think necessary or proper.

SEC. 9. Every petition shall be signed by the petitioner, if of sound mind and of legal age to consent to marriage; otherwise, upon application to the court, and after notice to the party in whose name the petition shall be filed, the court may allow such petition to be signed by a guardian or next friend.

SEC. 10. No petition for divorce shall be granted unless the petitioner shall at the time of preferring such petition be a domiciled inhabitant of this state, and have resided therein for the period of one year next before the preferring of such petition.

SEC. 11. All such petitions shall be filed, heard, and tried in Providence, unless the petitioner shall reside in the county of Newport or in the county of Washington, in which case such petition shall be filed, heard and tried in Newport or South Kingstown respectively.

SEC. 12. The court may by general rule determine the return-day of petitions for divorce and prescribe the notice to be given, within or without the state, on all such petitions, and may issue such process as may be necessary to carry into effect all powers conferred upon it in relation to the same; and said court may also, by general rule, fix the times, during its session, when all petitions for divorce shall be heard, as they may be filed in Providence, Newport, or South Kingstown, respectively. Such general rules shall, however, be subject to such special orders as the court may make in special cases. And, until general rules are made, special order in each case shall be made.

SEC. 13. Whenever any petition for divorce shall have been filed or be pending in the appellate division of the supreme court, and said court shall be of the opinion that sufficient notice of the pendency of said petition shall not, from any cause, have been given to the adverse party, said court may order notice or further notice to the adverse party to be given in such manner as the court may prescribe.

SEC. 14. The said court may regulate the custody and provide for the education, maintenance, and support of the children of all persons by them divorced or petitioning for a divorce, and all persons to whom a separate

maintenance may be granted or who may petition for the same ; may in its discretion make such allowance to the wife, out of the estate of the husband, for the purpose of enabling her to prosecute or defend against any such petition for divorce or separate maintenance, in case she has no property of her own available for such purpose, as they may think reasonable and proper ; and may make all necessary orders and decrees concerning the same, and the same may at any time alter, amend, and annul for sufficient cause, after notice to the parties interested therein.

SEC. 15. Any woman to whom a divorce from the bond of marriage is decreed may be authorized by such decree to change her name, subject to the same rights and liabilities as if her name had not been changed.

SEC. 16. After the filing and during the pendency of any petition for divorce the said court may make such interlocutory decrees and grant such temporary injunctions as may be necessary until a hearing can be had before said court.

GENERAL LAWS. CHAPTER 225.

OF DIVORCES.

SECTION 9. The clerks of the appellate division shall make returns to the secretary of the state board of health, on or before the first day of March in each and every year, for the year ending on the thirty-first day of December preceding, of all the applications for divorce, showing the number of applications, the number thereof continued, the number granted, and the causes for which the same are granted, but without the names of the parties, in accordance with the blanks which shall be furnished them by the secretary of state.

GENERAL LAWS. CHAPTER 287.

OF MEDICAL EXAMINERS AND CORONERS.

SECTION 1. The governor shall appoint, in each county, able and discreet men, learned in the science of medicine, to be medical examiners in such county.

SEC. 2. The number of medical examiners appointed as provided in the preceding section shall be as follows :

For the county of Washington five examiners, one in each of the five following districts, viz.: District one, composed of the town of Westerly ; district two, of the town of South Kingstown ; district three, of the town

of Hopkinton ; district four, of the towns of North Kingstown and Exeter ; district five, of the towns of Charlestown and Richmond.

For the county of Kent two examiners, one in each of the two following districts, viz.: District one, composed of the towns of West Greenwich and Coventry ; district two, of the towns of East Greenwich and Warwick.

For the county of Providence eleven examiners, one in each of the first nine following districts, and in district ten two examiners, viz.: District one composed of the towns of Scituate and Foster ; district two, of the towns of Cranston and Johnston ; district three, of the town of Glocester ; district four, of the towns of Smithfield and North Providence ; district five, of the towns of Burrillville and North Smithfield ; district six, of the city of Woonsocket ; district seven, of the town of Cumberland ; district eight, of the cities of Pawtucket and Central Falls and the town of Lincoln ; district nine, of the town of East Providence ; district ten, of the city of Providence.

For the county of Bristol, two examiners, one in each of the following districts, viz.: District one, composed of the towns of Barrington and Warren ; and district two, of the town of Bristol.

*The number of medical examiners for the county of Newport shall be five, one in each of the first three districts and two in district four ; and said districts shall be composed as follows : District one, of the towns of Tiverton and Little Compton ; district two, the town of Portsmouth ; district three, the town of New Shoreham ; district four, the city of Newport and the towns of Middletown and Jamestown.

SEC. 3. If either of the medical examiners shall, at any time, from any cause, be unable to perform the duties of his said office, or shall be deemed by the attorney-general for any cause disqualified therefor, a medical examiner from an adjoining district may be called upon to perform them.

SEC. 4. Every medical examiner shall hold his office for the term of six years, and until another is appointed and qualified to act in his place, unless sooner removed by the appointment of some other person to fill his place.

SEC. 5. Every medical examiner shall, within thirty days after his appointment, and before entering upon the duties of his office, give bond with surety to, and to the satisfaction of, the general treasurer in the sum of one thousand dollars for the faithful performance of his duties.

SEC. 6. If the condition of any such bond be broken, to the injury of any person, actions may be brought upon such bond as upon the official bonds of sheriffs.

SEC. 7. Medical examiners shall make examinations as hereinafter provided, upon bodies of such persons only as are supposed to have come to their death by violence : *Provided*, that in case any prisoner in the state

*As amended April 16, 1896.

prison or in any county jail dies while so imprisoned, it shall be the duty of the medical examiner of the district in which such prison or county jail is situated, upon being notified of the death of such prisoner, to make at once an examination upon the body of such deceased prisoner.

SEC. 8. When a medical examiner has notice that there has been found, or is lying, within his district the body of a person who is supposed to have come to his death by violence, he shall forthwith repair to the place where such body lies and take charge of the same ; and if, on view thereof and personal inquiry into the cause and manner of the death, he deems a further examination necessary, he shall, upon being thereto authorized in writing by the attorney-general, or by the mayor of the city or president of the town council of the town where such body lies, make an autopsy in the presence of two or more discreet persons as witnesses, and shall then and there carefully reduce, or cause to be reduced, to writing every fact and circumstance tending to show the condition of the body and the cause and manner of death, together with the names and addresses of said witnesses, which record he shall subscribe. Before making such autopsy he shall call the attention of the witnesses to the position and appearance of the body.

SEC. 9. Should the medical examiner deem it advisable to have present a physician as one of the witnesses as aforesaid, such physician shall also subscribe the record made by the medical examiner, and for such service he shall receive a compensation of five dollars.

SEC. 10. Town councils shall select a suitable person to act as coroner for their respective towns, to hold his office for three years and until another is elected and qualified to act in his place, unless sooner removed by the election of some other person to fill his place.

SEC. 11. The coroners so elected shall have exclusive jurisdiction as coroners in their respective towns.

SEC. 12. The coroner shall appoint in writing, under his hand and seal, one or more discreet persons to act as his deputy in case of his absence or inability to act, who shall have all the powers of a coroner, and be subject to like pains and penalties, for malfeasance in office ; and the coroner shall file a copy of the appointment in the town clerk's office of his town.

SEC. 13. The coroner may suspend or discharge a deputy. The suspension or discharge of a deputy shall be in writing, addressed to the deputy ; and the coroner shall forthwith file a duplicate thereof in the town clerk's office of his town.

SEC. 14. Every coroner and deputy coroner shall, before entering upon the duties of his office, take the engagement prescribed in section five of chapter twenty-five.

SEC. 15. Whenever the coroner has notice that there is in his town any person who has been injured by the criminal act, omission, or carelessness of another, and that said person believes that his death is impend-

ing from such injury, said coroner may take the statement of such person concerning the manner in which, and the person by whom, such injury was inflicted; and the statement so taken shall be reduced to writing and, if practicable, in the presence of the injured person.

SEC. 16. If, upon such view, personal inquiry or autopsy, the medical examiner is of the opinion that the death was caused by the act or neglect of some person other than the deceased, he shall at once notify the attorney-general, and coroner of the town where the body was found, or in which it lies, and shall file a duly attested copy of the record of his autopsy, or view, with the said coroner and a like copy with the attorney-general; and shall in all cases certify to the officer having the custody of the records of deaths in the town in which the deceased came to his death, the name and residence of the person deceased, if known, or, when the name and residence cannot be ascertained, a description of the deceased, as full as possibly may be, for identification, together with the cause and manner by and in which he came to his death.

SEC. 17. The coroner shall thereupon hold an inquest, which may be private; in which case any or all persons, other than those required to be present by the provisions of this chapter, may be excluded from the place where such inquest is held, and such coroner may also direct the witnesses to be kept separate so that they cannot converse with each other until they have been examined. The attorney-general, or some person designated by him, may attend the inquest and examine all witnesses; and the coroner shall cause the testimony to be reduced to writing and signed by the witnesses. The attorney-general may, if he deem it necessary or expedient, direct an inquest to be held in the case of any casualty from which the death of a person results.

SEC. 18. The coroner may issue summons for witnesses, returnable before him. The persons served with such process shall be allowed the same fees, their attendance may be enforced in the same manner, and they shall be subject to the same penalties, as if served with a summons in behalf of the state in a criminal prosecution pending before a district court.

SEC. 19. The coroner shall, after hearing the testimony, draw up and sign a report, in which he shall find and certify when, where, and by what means the person deceased came to his death; his name, if known, and all material circumstances attending his death; and if it appears that his death resulted wholly or in part from the unlawful act of any other person, he shall further state the name of such person, if known to him, and he shall file such report, and the testimony by him taken, together with a copy of the record of the autopsy or view, in the office of the clerk of the court wherein an indictment for the offence may be found.

SEC. 20. The coroner shall bind such witnesses as he deems necessary, or as the attorney-general may designate, by recognizance in a reasonable sum, with sufficient surety, to personally appear, at such time as the

coroner may designate, at the district court of the district wherein the inquest is held, and not depart therefrom until discharged by said court; and if any such witness shall refuse to recognize as aforesaid, the coroner shall commit such witness to the jail in the same county, there to remain until he shall so recognize or be otherwise discharged according to law.

SEC. 21. If the report of the coroner shall state that the death was caused by the unlawful act or by the gross carelessness of any other person, and by whose act the same was committed, he shall immediately make a complaint thereof against the person accused, in writing and on oath, to the justice or clerk of the district court in the district where the offence was committed, to the intent that the person killing or being in any way criminally instrumental to the death may be apprehended; but nothing herein contained shall be so construed as to prevent complaint being made at any time before the finding of the report. And the coroner shall forthwith, in writing, notify the attorney-general of the complaint aforesaid, that he may appear by himself or some person appointed by him, at the examination, and prosecute the claim in behalf of the state.

SEC. 22. If a medical examiner reports that a death was not caused by the act or neglect of some person other than the deceased, and the attorney-general is of a contrary opinion, the attorney-general may, notwithstanding such report, direct an inquest to be held in accordance with the provisions of this chapter; at which inquest he, or some other person designated by him, shall examine all the witnesses.

SEC. 23. The medical examiner may, if he deem it necessary, employ a chemist to aid in the examination of the body, or of substances supposed to have caused or contributed to the death; and such chemist shall be entitled to such compensation for his services as the medical examiner certifies to be just and reasonable, the same being audited and allowed in the manner hereinafter provided.

SEC. 24. When a medical examiner views or makes an examination of the dead body of a stranger, he shall cause the body to be decently buried; and if he certifies that he has made careful inquiry, and that to the best of his knowledge and belief the person found dead is a stranger, having no settlement in any town of the state, his fees, with the actual expense of burial, shall be paid from the general treasury. In all other cases the expense of the burial shall be first paid by the town wherein the body is found, and such town may recover the money so paid from the town where such person last had a settlement: *Provided, however,* that the general treasurer, or any town, ultimately paying any such burial expenses, shall have the right to recover such burial expenses from the estate of the deceased person.

SEC. 25. When services are rendered in bringing to land the dead body of a person found in any of the harbors, rivers, or water of the state, the medical examiner may allow such compensation for such services as he

deems reasonable ; but this provision shall not entitle any person to compensation for services rendered in searching for a dead body.

SEC. 26. In all cases arising under the provisions of this chapter, the medical examiner shall take charge of any money or other personal property of the deceased, found upon or near the body, and shall deliver the same to the person entitled to its custody or possession ; or if not claimed by such person within sixty days, then to an administrator, to be administered upon according to law.

SEC. 27. A medical examiner who fraudulently neglects or refuses to deliver any such property within three days, after demand upon him therefor, shall be imprisoned not exceeding two years or be fined not exceeding five hundred dollars.

SEC. 28. The fees of coroners shall, for the services specified in this chapter, be as follows, namely : For receiving and filing a duly attested copy of the record of an autopsy, fifty cents ; for every page of two hundred words of written testimony, thirty cents ; for each day's attendance in holding the inquest, five dollars ; for the recognizance of witnesses, thirty-five cents ; and for drawing up and filing a report in court, five dollars. Said fees having been audited by the state auditor, upon certificate of the attorney-general, shall be paid by the general treasurer.

SEC. 29. Each medical examiner shall receive fees as follows : For a view without an autopsy, four dollars ; for a view and an autopsy, thirty dollars ; and for travel, at the rate of ten cents a mile to the place of view. He shall also have power, in case of an autopsy, to employ a clerk at an expense not exceeding three dollars per day for each day's actual service.

SEC. 30. Every medical examiner shall return an account of the expenses of each view or autopsy, including his fees, to the state auditor, and shall annex to his return the written authority under which the autopsy was made. The state auditor shall audit such account and certify to the general treasurer what items in such account are deemed just and reasonable, and such items shall be paid by said treasurer to the persons entitled to receive the same.

SEC. 31. Medical examiners shall, in the books provided by the secretary of state, keep a record of all views of bodies found dead, together with their view and autopsy reports, and, on the first of January, April, July, and October, shall forward to the secretary of the state board of health attested copies of such records of views, together with the view reports and conclusions from autopsies. Should the commission of service of a medical examiner expire before the end of a quarter, the said examiner shall at once forward to the said secretary of the state board of health the records and reports of all cases unreported at date of expiration of said service.

SEC. 32. For each and every copy of said records and reports forwarded to the said secretary of the state board of health, medical examiners shall

receive twenty-five cents, which shall be paid by the state upon the voucher of said secretary of the state board of health that such copy of reports and records have been received by him.

SEC. 33. The secretary of the state board of health shall cause the returns received by him for each year, in accordance with this chapter, to be bound together with an index thereto ; the state registrar shall prepare or cause to be prepared from the said returns such tabular results as will render them of practical utility, and shall make report thereof annually in connection with the report of births, marriages, and deaths required by chapter one hundred.

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this group has been added atelectasis pulmonum, also cholera infantum. Convulsions is allowed to remain. Although every effort is made to ascertain the cause of this symptom, and it is frequently dependent upon intestinal disturbances as well as nervous derangements, yet it is impossible for the physician to ascertain the provoking cause. As it is not sufficiently "ill-defined" to be relegated to that group, being a disease of childhood, it is placed in this group.

Under Developmental Diseases of Women the various subdivisions of the causes of death in childbirth have been given and an effort made to obtain these special causes rather than let them remain as simply "childbirth."

Diseases of nutrition are omitted, as atrophy or debility is found to be either in the group of old age, or diseases of infants, or caused by some disease which can be ascertained. If the cause is not evident to the physician, it is evidently a cause unknown, and should be classed as such.

Under the group Accident or Negligence, the term fractures or contusions is omitted, as it is ascertained in every case what caused these injuries. The results of the injuries are treated of as supplemental, as is also the instrument causing the injury, or the form of poison, or the method of drowning, etc. The division Various is subdivided into more specific causes, and introduces into this group electric-car accidents, falls, fire-arms, machinery, overdose of medicine, railroad, and "otherwise."

Under Causes Ill-defined, and which are invariably inquired into for more satisfactory information, there are a large number which may be found in the supplementary list. Blood poisoning is due usually to some known traumatic or infectious cause, as is septicæmia. When not known it is ill-defined. The cause of coma should be given if known, as it may be from cerebral hemorrhage or from uræmia. Convulsions, not infantile, are usually due to some traceable cause. Ascites, colic, dropsy, exhaustion, and inflammation are symptoms and not causes. Debility and asthenia not infantile and not senile can usually be traced to some definite change in the system, otherwise it is ill-defined. It has been customary heretofore for physicians to give as a cause of death "heart failure," meaning that the heart ceased its action or that the cause was a natural one not accompanied by violence. It is generally admitted that this is unsatisfactory, and with this compilation, when the cause of the heart failure cannot be obtained, it is classed as ill-defined. While peritonitis may be idiopathic, in most instances a cause of the peritonitis has been ascertainable; it has been classed as ill-defined if no cause is known. Shock, when occurring as surgical shock, being usually

the result of accident or surgical operation, is classed under these groups. When no accompanying cause is given, as might be the case from fright, or sudden joy, the cause is usually due to some abnormality of the nervous system or disease of the heart, and in the absence of the specific cause must be placed under ill-defined. When given as a single cause in cases of cerebral hemorrhage or apoplexy, the latter cause can be ascertained by inquiry, and proves to be the cause in most instances. The following list comprises those causes which have been returned and, not being sufficiently definite, have led to inquiry from the physician in attendance. The only causes which cannot be more explicitly defined, and are sufficient as primary causes, are appendicitis and hernia. In these two instances inquiry is made as to whether an operation was performed for relief of the condition. In acute gastritis it is desirable to ascertain if the condition was due to the ingestion of some irritant, as alcohol, poison, or is the result of indigestion. More specific cause is asked for in childbirth, miscarriage, premature birth, and still-birth, in order to determine in as many cases as possible what was the condition of the mother or the complication in confinement which has led up to the result which is the cause of the death of the child. By spinal disease is sometimes meant disease of the spinal cord, in other cases diseases of the spinal column, and calls for inquiry.

Abscess,	Diabetes,	Malformation,
Accident,	Dropsy,	Marasmus,
Appendicitis,	Drowning,	Miscarriage,
Ascites,	Eclampsia,	Mortification,
Asphyxia,	Erysipelas,	Natural causes,
Asthenia,	Exhaustion,	Necrosis,
Blood Poisoning,	Fever,	Peritonitis,
Bowels, perforation of,	Fistula,	Poisoning,
Burns,	Fractures,	Premature Birth,
Brain, concussion of,	Gangrene,	Scalds,
Brain trouble,	Gastritis, Acute,	Septicemia,
Brain fever,	Heart Failure,	Shock,
Cancer,	Heart trouble,	Spasms,
Carbuncle,	Heart, paralysis of,	Spinal Disease,
Childbirth,	Hernia,	Stillborn,
Colic,	Hæmorrhage,	Strangulation,
Convulsions,	Homicide,	Suffocation,
Coma,	Inflammation,	Suicide,
Croup,	Laryngeal obstruction,	Tumor,
Debility,	Lungs, Œdema of,	Wounds.
Dentition,		

NOMENCLATURE OF CAUSES OF DEATH.

CLASSES.

- I. General Diseases.—A. SPECIFIC AND FEBRILE. (*Zymotic.*)
- II. General Diseases.—B. CACHETIC. (*Constitutional.*)
- III. General Diseases.—A. FUNCTIONAL OR ORGANIC. (*Local.*)
- IV. Special Diseases.—B. DEVELOPMENTAL. (*Developmental.*)
- V. Violence. —C. FROM INJURIES, ETC. (*Violent.*)

SUB GROUPS OR ORDERS.

CLASS I.—Zymotic Diseases.

GROUP ONE, Communicable. GROUP TWO, Dietic.

CLASS II.—Constitutional Diseases.

GROUP ONE, Diathetic.

CLASS III.—Local Diseases.

GROUP ONE, Diseases of the Nervous System. GROUP TWO, Organs of Circulation. GROUP THREE, Organs of Respiration. GROUP FOUR, Organs of Digestion. GROUP FIVE, Urinary Organs. GROUP SIX, Reproductive Organs. GROUP SEVEN, Osseous and Locomotory Organs. GROUP EIGHT, Integumentary System.

CLASS IV.—Developmental Diseases.

GROUP ONE, Of Children. GROUP TWO, Of Women. GROUP THREE, Of Old Age.

CLASS V.—Deaths by Violence.

GROUP ONE, Accidents and Negligence. GROUP TWO, Homicide. GROUP THREE, Suicide.

STATISTICAL NOSOLOGY.

CLASS I.—Zymotic Diseases.

TABULAR LIST.

For Table IX of the Registration Report.

GROUP ONE.—Communicable.

- I. One.—1. Varicella.....
2. Measles
3. Scarlet Fever.....
4. Diphtheria.....
5. Small-Pox.....
6. Tonsilitis.....
7. Carbuncle.....
8. Erysipelas.....
9. Fever, Puerperal.....
10. Malignant Pustule.....
11. Meningitis, Cerebro Spinal...
12. Tetanus.....
13. Fever, Malarial.....
14. Fever, Typhoid.....
15. Influenza.....
16. Parotitis.....
17. Pertussis.....
18. Pneumonia.....
19. Gonorrhœa
20. Syphilis.....
21. Hydrocephalus.....
22. Scrofula.....
23. Tabes Mesenterica.....
24. Tubercular Laryngitis.....
25. Tubercular Meningitis.....
26. Tubercular Peritonitis.....
27. Tuberculosis, Pulmonary....
28. Tuberculosis, General.....

GROUP TWO.—Dietic.

- I. Two.—1. Alcoholism.....
2. Inanition.....
3. Purpura and Scurvy.....

SUPPLEMENTAL LIST.

Synonyms or Related Diseases.

GROUP ONE.—Communicable.

- I. One.—1. Chicken-Pox.
Miliaria.
Roseola.
2. Rotheln.
3. Scarlet Fever.
4. Membranous Croup.
6. Quinsy.
7. Anthrax.
Gangrenous Boil.
8. Hospital Gangrene.
Pyæmia.
12. Laryngismus.
Lockjaw.
Trismus Nascentium.
16. Mumps.
17. Whooping Cough.
18. Congestion of Lungs.
19. Stricture of Urethra.
Gonorrhœal Ophthalmia.
22. Psoas (Lumbar) Abscess.
Goitre.
Adenitis.
Lymphangitis.
Morbus Coxarius.
Pott's Disease.
27. Hæmoptysis.

GROUP TWO.—Dietic.

- I. Two.—1. Delirium Tremens.
Intemperance.

CLASS II.—Constitutional Diseases.

GROUP ONE.—Diathetic.

- II. One.—1. Anæmia.....
2. Cancer, Abdomen
3. Cancer, Breast.....
4. Cancer, Face.....
5. Cancer, Liver
6. Cancer, Rectum.....
7. Cancer, Stomach
8. Cancer, Uterus
9. Cancer, Various.....
10. Rheumatism.....

GROUP. ONE.—Diathetic.

- II. One.—1. Leucocythæmia.
Chlorosis.
10. Rheumatic Carditis.
Rheumatic Synovitis.
Gout.

CAUSES OF DEATH.

CLASS III.—Local Diseases.

TABULAR LIST.

GROUP ONE.—Nervous System.

- III. One.—1. Apoplexy and Paralysis..
 2. Cerebritis
3. Chorea
4. Epilepsy.....
5. Insanity
6. Meningitis.....
7. Meningitis, Spinal
8. Brain Diseases*.....
9. Nerve Diseases*.....

GROUP TWO.—Circulatory System.

- III. Two.—1. Aneurism
2. Angina Pectoris.....
3. Endocarditis.....
4. Pericarditis.....
5. Phlebitis.....
6. Sclerosis
7. Heart Diseases*.....

GROUP THREE.—Respiratory System.

- III. Three.—1. Asthma.....
2. Bronchitis, Acute.....
3. Bronchitis, Chronic.....
4. Croup
5. Laryngitis.....
6. Pleurisy.....
7. Lung Diseases*.....

GROUP FOUR.—Digestive System.

- III. Four.—1. Appendicitis.....
2. Bowels, Obstruction of..
 3. Bowel Diseases*.....
4. Colitis.....
5. Colitis, Entero
6. Diarrhœa
7. Dysentery.....
8. Enteritis.....
9. Enteritis, Gastro.....
10. Fistula
11. Gall-Stones.....
12. Gastritis.....
13. Gastritis, Acute.....
14. Hepatitis.....
15. Hernia.....
16. Intestines, Stricture of..
 17. Intestines, Ulceration of..
 18. Intussusception.....
19. Jaundice.....
20. Liver, Cirrhosis of.
21. Liver Diseases*.....
22. Spleen Diseases*.....
23. Stomach, Ulceration of..
 24. Stomach Diseases*.....

SUPPLEMENTAL LIST.

- III. One.—1. Cerebral Hemorrhage.
 Locomotor Ataxia.
 Paresis.
 5 Dementia.
 Mania.
 Monomania.
 Melancholia.
 8. Neurasthenia.
 Disease of Spinal Cord.
 9. Hysteria.
 Nervous Prostration.
 Neuritis.
 Myelitis.
 Pleurodynia.

- III. Two.—7. Hypertrophy.
 Valvular Disease.
 Embolism.
 Thrombosis.

- III. Three.—1. Emphysema.
 4. Œdema Glottidis.
 6. Empyema.

- III. Four.—2. Constipation.
 Ileus.
 Ob-tipation.
 12. Stomatitis.
 Œsophagitis.
 15. Femoral.
 Inguinal.
 Umbilical.
 Ventral.
 16. Stricture of Œsophagus.
 17. Perforation of—
 24. Dyspepsia.
 Gastric.
 Hæmatemesis.

* Not otherwise placed.

STATISTICAL NOSOLOGY.

CLASS III.—Local Diseases.—Continued.

TABULAR LIST.

GROUP FIVE.—Urinary System.

- III. Five.—1. Bladder Diseases*.....
 2. Calculus.....
 3. Cystitis
 4. Diabetes
 5. Diabetes, Mellitus.
 6. Ischuria
 7. Kidney Diseases*.....
 8. Kidney, Bright's Dis. of..
 9. Nephritis.
 10. Nephritis, Chronic.....
 11. Prostate Disease
 12. Uræmia.....

GROUP SIX.—Generative System.

FEMALE.

- III. Six.—1. Ovarian Diseases*.....
 2. Ovarian Tumor
 3. Diseases of Uterus.
 4. Pyo Salpynx.....

GROUP SEVEN.—Osseous and Locomotory System.

- III. Seven.—1. Bones, Diseases of.....
 2. Joint Diseases*.....
 3. Vertebrae, Diseases of...

GROUP EIGHT.—Integumentary System.

- III. Eight.—1. Eczema.
 2. Phlegmon.....
 3. Skin Diseases*.....

GROUP NINE.—Organs of Special Sense.

- III. Nine.—1. Ossis Petrositis.....
 2. Otitis

SUPPLEMENTAL LIST.

- III, Five.—1. Urethritis.
 7. Hæmaturia.
 8. Albuminuria.

- III. Six.—3. Tumor, Fibroid.
 Pelvic Cellulitis.
 Hemorrhage of.

- III. Seven.—1. Gstitis.
 Periostitis.
 Rickets.
 Caries, Necrosis.
 2. Synovitis.
 Hip Diseases.
 3. Spine, Caries and Necrosis of.

- III. Eight.—2. Abscess, part not stated.
 Boil.
 3. Pemphigus.
 Psoriasis, etc.
 Dermatitis.

* Not otherwise placed.

CAUSES OF DEATH.

CLASS IV.—Developmental Diseases.

TABULAR LIST

SUPPLEMENTAL LIST.

GROUP ONE.—Developmental Diseases of Children.

- IV. One.—1. Atelectasis Pulmonum....
 2. Cholera Infantum.....
 3. Convulsions.....
 4. Cyanosis.....
 5. Debility, Infantile.....
 6. Premature Birth....
 7. Dentition.....
 8. Hemorrhage, Umbilical...
 9. Icterus Neonatorum.....
 10. Indigestion.....
 11. Innutrition.....
 12. Spina Bifida.....
 13. Other Malformations....

- IV. One.—5. Asthenia.
 8. Hemorrhagic Diathesis.
 11. Malnutrition.
 13. Imperforate Anus,
 Cleft Palate.

GROUP TWO.—Developmental Diseases of Women.

- IV. Two.—1. Paramenia.....
 2. Difficult Labor.....
 3. Miscarriage.....
 4. Placenta Prævia.....
 5. Post Partum Hemorrhage.
 6. Puerperal Eclampsia.....
 7. Puerperal Mania.....
 8. Puerperal Peritonitis.....
 9. Childbirth*.....

- IV. Two.—1. Climacteria.

GROUP THREE.—Developmental Diseases of Old People.

- IV. Three.—1. Old Age.....
 2. Debility, Senile.....
 3. Gangrene.....

CLASS V.—Deaths by Violence.

GROUP ONE.—Accident or Negligence.

- V. One.—1. Asphyxia.....
 2. Burns and Scalds.....
 3. Drowning.....
 4. Electric Car.....
 5. Falls.....
 6. Firearms.....
 7. Machinery.....
 8. Overdose of Medicine.....
 9. Poison.....
 10. Railroad.....
 11. Otherwise.....

- V. One.—11. Freezing.
 Exposure.
 Insolation.
 Lightning.
 Surgical Operation.

* Not otherwise placed.

STATISTICAL NOSOLOGY.

CLASS V.—Deaths by Violence.—Continued.

TABULAR LIST.	SUPPLEMENTAL LIST.
<p>GROUP TWO.—Homicide.</p> <p>GROUP THREE.—Suicide.</p> <p>V. Three.—1. Drowning.....</p> <p> 2. Hanging</p> <p> 3. Poison... ..</p> <p> 4. Wounds, gun or pistol...</p> <p> 5. Wounds, knife</p>	<p>V. Two.—1. Infanticide.</p> <p> Patricide.</p> <p> Matricide.</p> <p> Fratricide.</p> <p> Filicide.</p> <p>V. Three.—3. Arsenic.</p> <p> Laudanum.</p> <p> Paris Green.</p> <p> Other.</p>
<p>1. Causes ill-defined.....</p> <p>2. Causes not stated</p> <p>3. Stillborn.....</p>	<p>1. Blood Poisoning.</p> <p> Coma.</p> <p> Convulsions (not infantile).</p> <p> Colic.</p> <p> Debility (not infantile and not senile).</p> <p> Dropsy or Ascites.</p> <p> Exhaustion.</p> <p> Heart Failure.</p> <p> Inflammation.</p> <p> Mortification.</p> <p> Peritonitis.</p> <p> Septicæmia.</p> <p> Shock.</p> <p> Dentition.</p>

THE INTERNATIONAL SYSTEM OF NOMENCLATURE OF DISEASES AND CAUSES OF DEATH

(BERTILLON CLASSIFICATION)

AS ADOPTED BY THE EIGHTH INTERNATIONAL CONGRESS OF HYGIENE AND
DEMOGRAPHY, PARIS, AUGUST 18-21, 1900.

(Translated in the Bureau of the Marine Hospital Service by Passed Assistant H. D. Weddings.)

NOSOLOGICAL NOMENCLATURE.

(Adopted by the International Commission.)

NOMENCLATURE DESIGNED FOR STATISTICS OF PATIENTS.

I.

General Diseases.

- | | |
|---|--|
| 1. Typhoid Fever. | 25. Pellagra. |
| 2. Exanthematous Typhus. | 26. Tubercle of the Larynx. |
| 3. Recurrent Fever. | 27. Tubercle of the Lungs. |
| 4. Intermittent Fever and Malarial Cachexia. | 28. Tubercle of the Meninges. |
| 4a. Intermittent Fever and Malarial Cachexia. | 29. Tubercle, Abdominal. |
| 5. Variola. | 30. Pott's Disease. |
| 6. Measles. | 31. Abscess, Cold and by Congestion. |
| 7. Scarlatina. | 32. Tumors, White (White Swellings). |
| 8. Whooping Cough. | 33. Tubercle of Other Organs. |
| 9. Diphtheria and Croup. | 34. Tubercle, Generalized. |
| 9a. Diphtheria. | 35. Scrofula. |
| 10. Grippe. | 36. Syphilis: (1) Primary; (2) Secondary; |
| 11. Miliary Fever. | (3) Tertiary; (4) Hereditary. |
| 12. Asiatic Cholera. | 36a. Soft Chancre. |
| 13. Cholera Nostras. | 37. Bleorrhagia of the Adult. |
| 14. Dysentery. | 38. Gonococcal Infections of the Child. |
| 14a. Dysentery, Epidemic. | 39. Cancer and Other Malignant Tumors of the Buccal Cavity. |
| 15. Pest (Plague; Bubonic Plague). | 40. Cancer and Other Malignant Tumors of the Stomach and Liver. |
| 16. Yellow Fever. | 41. Cancer and Other Malignant Tumors of the Peritoneum, Intestines, and Rectum. |
| 17. Leprosy. | 42. Cancer and Other Malignant Tumors of the Genital Organs of the Female. |
| 18. Erysipelas. | 43. Cancer and Other Malignant Tumors of the Breast. |
| 19. Other Epidemic Affections. | 44. Cancer and Other Malignant Tumors of the Skin. |
| 20. Purulent Infection and Septicæmia. | 45. Cancer and Other Malignant Tumors of Organs Not Specified. |
| 21. Glanders and Farey. | 46. Other Tumors (Tumors of the Female Genital Organs excepted). |
| 22. Malignant Pusule and Charbon. | 47. Rheumatism, Acute Articular. |
| 23. Rabies. | |
| 24. Actinomycosis, Trichinosis, etc. | |

48. Rheumatism, Chronic, and Gout.
49. Scorbutus.
50. Diabetes.
51. Goitre, Exophthalmic.
52. Addison's Disease.
53. Leukæmia
54. Anæmia and Chlorosis.
55. Other General Diseases.
56. Alcoholism, Acute and Chronic.
57. Saturnism.
58. Other Trade Intoxications.
59. Other Chronic Poisonings.

II.

Diseases of the Nervous System and the Organs of Special Sense.

60. Encephalitis.
61. Meningitis, Simple.
- 61a. Meningitis, Epidemic Cerebro-Spinal.
62. Locomotor Ataxia, Progressive.
63. Other Diseases of the Spinal Cord.
64. Cerebral Congestion and Hemorrhage.
65. Cerebral Softening.
66. Paralysis Without Cause Assigned.
67. General Paralysis.
68. Other Forms of Mental Alienation.
69. Epilepsy.
70. Eclampsia (non-puerperal).
71. Convulsions of Children.
72. Tetanus.
73. Chorea.
74. Hysteria.
- 74a. Neuralgia.
- 74b. Other Affections of the Nervous System.
75. Diseases of the Eye and Appendages.
- 75a. Conjunctivitis, Follicular.
- 75b. Trachoma.
76. Diseases of the Ear.

III.

Diseases of the Circulatory Apparatus.

77. Pericarditis.
78. Endocarditis, Acute.
79. Organic Diseases of the Heart.
80. Angina Pectoris.
81. Affections of the Arteries (Atheroma, Aneurism, etc.)
82. Embolism and Thrombosis.
83. Affections of the Veins (Varices, Hemorrhoids, Phlebitis, etc.)
84. Affections of the Lymphatic System.
85. Hemorrhages.
86. Other Affections of the Circulatory Apparatus.

IV.

Diseases of the Respiratory System.

87. Diseases of the Nasal Fossæ.
88. Affections of the Larynx.
89. Affections of the Thyroid Body.
90. Bronchitis, Acute.
91. Bronchitis, Chronic.
92. Broncho-pneumonia.
93. Pneumonia.
94. Pleurisy.
95. Pulmonary Congestion and Apoplexy.
96. Gangrene of Lung.
97. Asthma.
98. Emphysema, Pulmonary.
99. Other Diseases of the Respiratory Apparatus (Phthisis excepted).

V.

Diseases of the Digestive Apparatus.

100. Affections of the Mouth and its Adnexa.
101. Affections of the Pharynx.
102. Affections of the Esophagus.
103. Ulcer of the Stomach.
104. Other Affections of the Stomach (Cancer excepted).
105. Diarrhœa and Enteritis (under 2 years).
- 105a. Diarrhœa and Enteritis, Chronic.
106. Diarrhœa and Enteritis (over 2 years).
107. Parasites, Intestinal.
108. Hernias and Intestinal Obstructions.
109. Other Affections of the Intestines.
- 109a. Diseases of the Anus and Fecal Fistulas.
110. Icterus, Grave.
111. Hydatid Tumors of the Liver.
112. Cirrhosis of the Liver.
113. Biliary Calculi.
114. Other Affections of the Liver.
115. Affections of the Spleen.
116. Peritonitis, Simple (Puerperal excepted).
117. Other Affections of the Digestive Apparatus (Cancer and Tubercle excepted).
118. Appendicitis and Abscess of the Iliac Fossa.

VI.

Diseases of the Genito-Urinary Apparatus and Its Adnexa.

119. Nephritis, Acute.
120. Bright's Disease.
121. Other Diseases of the Kidneys and their Adnexa.
122. Calculi of the Urinary Tract.
123. Diseases of the Bladder.
124. Diseases of the Urethra, Urinary Abscess, etc.
125. Diseases of the Prostate.
126. Non-venereal Diseases of the Male Genital Organs.
127. Metritis.
128. Hemorrhage, Uterine, Non-puerperal.
129. Tumor, Uterine, Non-cancerous.
130. Other Diseases of the Uterus.
131. Cysts and Other Tumors of the Ovary.
132. Other Diseases of the Female Genital Organs.
133. Diseases of the Breast, Non-puerperal (Cancer excepted).

VII.

Puerperal State.

134. Accidents of Pregnancy.
- 134a. Normal Labor.
135. Hemorrhage, Puerperal.
136. Other Accidents of Labor.
137. Septicæmia, Puerperal.
138. Albuminuria and Puerperal Eclampsia.
139. Phlegmasia Alba Dolens, Puerperal.
140. Other Puerperal Accidents—Sudden Death.
141. Puerperal Diseases of the Breast.

VIII.

Diseases of the Skin and Cellular Tissue.

142. Gangrene.
143. Furuncle (Carbuncle).

- 144. Phlegmon, Warm Abscess.
- 145. Tinea Favus.
- 145a. Tinea Tonsurans, Tricophyton.
- 145b. Pelades.
- 145c. Itch.
- 145d. Other Diseases of the Skin and Its Annexa.

IX.

Diseases of the Organs of Locomotion.

- 146. Affections of the Bones (Non-tuberculous).
- 147. Arthritis and Other Affections of the Articulations (Tubercle and Rheumatism excepted).
- 148. Amputation.
- 149. Other Affections of the Organs of Locomotion.

X.

Malformations.

- 150. Malformations, Congenital (Still-births excepted).

XI.

Early Infancy.

- 150a. New-born and Nurslings out of Hospitals, without being sick.
- 151. Congenital Debility, Icterus and Sclerema.
- 152. Other Diseases appertaining to Infancy.
- 153. Lack of Care.

XII.

Old Age.

- 154. Senile Debility.

XIII.

Affections produced by External Causes.

- 155. Suicide by Poison.
- 156. Suicide by Asphyxia.
- 157. Suicide by Hanging or Strangulation.
- 158. Suicide by Submersion.
- 159. Suicide by Firearms.
- 160. Suicide by Cutting Instruments.
- 161. Suicide by Jumping from High Places.
- 162. Suicide by Crushing.
- 163. Other Suicides.
- 164. Fractures.
- 165. Sprains.
- 165a. Luxations.
- 166. Other Accidental Traumatism.
- 167. Burns and Scalds.
- 168. Burns by Corrosive Substances.
- 169. Insolation.
- 170. Freezing.
- 171. Electrical Disturbances.
- 172. Accidental Submersion.
- 173. Prostration.
- 173a. Inanition.
- 174. Absorption of Deleterious Gases (Suicide excepted).
- 175. Other Acute Poisonings.
- 176. Other External Violence.

XIV.

Ill-defined Diseases.

- 177. Dropsy.
- 178. Sudden Death.
- 179. Non-specified or Ill-defined Causes of Death.

NOMENCLATURE DESIGNED FOR STATISTICS OF DEATH.

DETAILED NOMENCLATURE.

I.

General Diseases.

- 1. Typhoid Fever (abdominal typhus).
- 2. Typhus, exanthematic.
- 3. Fever, recurrent.
- 4. Fever, Intermittent, and Malarial Cachexia.
- 4a. Malarial Cachexia.
- 5. Variola.
- 6. Measles.
- 7. Scarlatina.
- 8. Whooping Cough.
- 9. Diphtheria and Croup.
- 9a. Diphtheria.

- 10. Grippe.
- 11. Miliary Fever.
- 12. Cholera, Asiatic.
- 13. Cholera, nostras.
- 14. Dysentery.
- 14a. Dysentery, epidemic.
- 15. Pest (Plague).
- 16. Yellow Fever.
- 17. Leprosy.
- 18. Erysipelas.
- 19. Other Epidemic Affections.
- 20. Purulent Infection and Septicæmia.
- 21. Glanders and Farcy.
- 22. Malignant Pustule and Charbon (Anthrax).
- 23. Rabies.
- 24. Actinomycosis, Trichinosis, etc.

25. Pellagra.
26. Tubercle of Larynx.
27. Tubercle of Lungs.
28. Tubercle of Meninges.
29. Tubercle, Abdominal.
30. Pott's Disease.
31. Abscess, Cold and by Congestion.
32. White Tumors (White Swellings).
33. Tubercle of Other Organs.
34. Generalized Tubercle.
35. Scrofula.
36. Syphilis.
37. Hemorrhagia of the Adult.
38. Gonococcal Infections of Children.
39. Cancer and Other Malignant Tumors of the Buccal Cavity.
40. Cancer and Other Malignant Tumors of the Stomach and Liver.
41. Cancer and Other Malignant Tumors of the Peritoneum, Intestines, and Rectum.
42. Cancer and Other Malignant Tumors of the Female Genitals.
43. Cancer and Other Malignant Tumors of the Breast.
44. Cancer and Other Malignant Tumors of the Skin.
45. Cancer and Other Malignant Tumors of Other Organs and Organs not specified.
46. Other Tumors (Tumors of the Female Genitals excepted).
47. Rheumatism, Acute, Articular.
48. Rheumatism, Chronic, and Gout.
49. Scorbutus.
50. Diabetes.
51. Goitre, Exophthalmic.
52. Addison's Disease.
53. Leukæmia.
54. Anæmia, Chlorosis.
55. Other General Diseases.
56. Alcoholism, Acute and Chronic.
57. Saturnism.
58. Other Professional Intoxications.
59. Other Chronic Poisonings.

II.

Diseases of the Nervous System and Organs of Special Sense.

60. Encephalitis.
61. Meningitis, Simple.
- 61a. Meningitis, Epidemic Cerebro-spinal.
62. Locomotor Ataxia.
63. Other Diseases of the Spinal Cord.
64. Cerebral Congestion and Hemorrhage.
65. Cerebral Softening.
66. Paralysis Without Specific Cause.
67. Paralysis, General.
68. Other Forms of Mental Alienation.
69. Epilepsy.
70. Eclampsia (non puerperal).
71. Convulsions of Children.
72. Tetanus.
73. Chorea.
- 74b. Other Diseases of the Nervous System.
75. Diseases of the Eye and its Adnexa.
76. Diseases of the Ear.

III.

Diseases of the Circulatory Apparatus.

77. Pericarditis.
78. Endocarditis, Acute.
79. Organic Diseases of the Heart.
80. Angina Pectoris.
81. Affections of the Arteries (Atheroma, Aneurism, etc.)

82. Embolus and Thrombosis.
83. Affections of the Veins (Varices, Hemorrhoids, Phlebitis).
84. Affections of the Lymphatic System (Lymphangitis, etc.)
85. Hemorrhages.
86. Other Affections of the Circulatory System.

IV.

Diseases of the Respiratory System.

87. Diseases of the Nasal Fossæ.
88. Affections of the Larynx.
89. Affections of the Thyroid Body.
90. Bronchitis, Acute.
91. Bronchitis, Chronic.
92. Broncho-Pneumonia.
93. Pneumonia.
94. Pleurisy.
95. Pulmonary Congestion and Apoplexy.
96. Gangrene of the Lung.
97. Asthma.
98. Pulmonary Emphysema.
99. Other Diseases of the Respiratory Apparatus (Phthisis excepted).

V.

Diseases of the Digestive Apparatus.

100. Affections of the Mouth and its Adnexa.
101. Affections of the Pharynx.
102. Affections of the Esophagus.
103. Ulcer of the Stomach.
104. Other Affections of the Stomach (Cancer excepted).
105. Diarrhœa and Enteritis (under 2 years).
- 105a. Diarrhœa and Enteritis, Chronic.
106. Diarrhœa and Enteritis (over 2 years).
107. Intestinal Parasites.
108. Hernias; Intestinal Obstructions.
109. Other Affections of the Intestines.
110. Icterus Gravis.
111. Tumors, Hydatid of the Liver.
112. Cirrhosis of the Liver.
113. Biliary Calculi.
114. Other Affections of the Liver.
115. Affections of the Spleen.
116. Peritonitis, Simple (Puerperal excepted).
117. Other Affections of the Digestive Apparatus (Cancer and Tubercle excepted).
118. Appendicitis and Abscess of the Iliac Fossa.

VI.

Diseases of the Genito-Urinary Apparatus and Its Adnexa.

119. Nephritis, Acute.
120. Bright's Disease.
121. Other Diseases of the Kidneys and their Adnexa.
122. Calculi of the Urinary Tract.
123. Diseases of the Bladder.
124. Diseases of the Urethra, Urinary Abscess, etc.
125. Diseases of the Prostate.
126. Non-venereal Diseases of the Male Genital Organs.
127. Metritis.
128. Hemorrhage, Uterine (non-puerperal).
129. Tumor, Uterine (non-cancerous).
130. Other Diseases of the Uterus.
131. Cysts and Other Tumors of the Ovary.

- 132. Other Diseases of the Female Genital Organs.
- 133. Non-puerperal Diseases of the Breast (Cancer excepted).

VII.

The Puerperal State.

- 134. Accidents of Pregnancy.
- 135. Hemorrhage, Puerperal.
- 136. Other Accidents of Labor.
- 137. Septicemia, Puerperal.
- 138. Albuminuria and Puerperal Eclampsia.
- 139. Phlegmasia Alba Dolens.
- 140. Other Puerperal Accidents — Sudden Death.

VIII.

Diseases of the Skin and Cellular Tissue.

- 142. Gangrene.
- 143. Furuncle (Carbuncle).
- 144. Abscess, Warm.
- 145d. Other Diseases of the Skin and its Adnexa.

IX.

Diseases of the Organs of Locomotion.

- 146. Affections of the Bones (non-tuberculous).
- 147. Arthritis and Other Affections of the Joints (Tubercle and Rheumatism excepted).
- 148. Amputation.
- 149. Other Affections of the Organs of Locomotion.

X.

Malformations.

- 150. Malformations, Congenital (Still-births excepted).

XI.

Early Infancy.

- 151. Congenital Icterus, Debility and Sclerosis.
- 152. Other Diseases of Early Infancy.
- 153. Lack of Care.

XII.

Old Age.

- 154. Senile Debility.

XIII.

Affections produced by External Causes.

- 155. Suicide by Poison.
- 156. Suicide by Asphyxia.
- 157. Suicide by Hanging or Strangulation.
- 158. Suicide by Submersion.
- 159. Suicide by Firearms.
- 160. Suicide by Cutting Instruments.
- 161. Suicide by Jumping from High Places.
- 162. Suicide by Crushing.
- 163. Other Suicides.
- 164. Fractures.
- 165. Luxations.
- 166. Other Accidental Traumatisms.
- 167. Burns and Scalds.
- 168. Burning by Corrosive Substances.
- 169. Insolation.
- 170. Freezing.
- 171. Electrical Disturbances.
- 172. Accidental Submersion.
- 173a. Inanition.
- 174. Absorption of Deleterious Gases (Suicide excepted).
- 175. Other Acute Poisonings.
- 176. Other External Violence.

XIV.

Ill-defined Diseases.

- 177. Dropsy.
- 178. Sudden Death.
- 179. Unspecified or Ill-defined Causes of Death.

APPENDIX B.

THE LAWS OF RHODE ISLAND

(As amended February 1, 1896)

IN RELATION TO THE REGISTRATION OF

BIRTHS, MARRIAGES, AND DEATHS, AND OF DIVORCE.

GENERAL LAWS, CHAPTER 100.

OF THE REGISTRATION OF BIRTHS, MARRIAGES, AND DEATHS.

SECTION 1. The town clerks of the several towns, or any person whom the board of aldermen of any city, or the town council of any town, may appoint for that purpose, shall obtain, chronologically record and index, as required by the forms prescribed by section three of this chapter, all information concerning births, marriages, and deaths occurring among the inhabitants of their respective towns; and on or before the first Monday in March, annually, shall make duly certified returns thereof to the secretary of the state board of health for the year ending on the thirty-first day of December next preceding, accompanying the same with a list of the persons required by law to make returns to them who have neglected to do so, and with such remarks relating to the object of this chapter as they may deem important to communicate.

SEC. 2. The secretary of the state board of health shall receive the returns made in pursuance of the preceding section, and annually make a general abstract and report thereof, in form as prescribed by section three of this chapter, and publish not exceeding one thousand copies thereof; and for preparing, tabulating, and publishing said annual report such sum as may be provided by law shall be paid to the state registrar. Said returns, after such report is prepared, shall be deposited in the office of the secretary of state, who shall cause the same to be arranged, full alphabetical indices of all the names to be made, and the whole to be bound in volumes of convenient size and carefully preserved in his office.

SEC. 3. The blank forms required to carry out the provisions of this chapter shall, on application, be furnished by the secretary of the state board of health to clergymen, physicians, undertakers, town clerks, clerks of meetings of the Society of Friends, and other persons requiring them, substantially as follows: The record of a birth shall state the date and place of birth, name of the child if it has any, the sex and color of the child, whether born alive or still-born, the name and surname, color, residence, and birthplace of the parents, and the occupation of the father, and the time of recording, so far as the same can be ascertained. The record of a marriage shall state the date of the marriage, place, name, residence, and official station of the person by whom married, names and surnames of the parties, age, color, occupation, and residence of each, condition, that is, whether single or widowed, what marriage, that is, whether first, second, third, or other marriage, the occupation, birthplace, and name of their parents, and the time of recording, so far as the same can be ascertained. The record of deaths shall state the date of the death, name and surname of deceased, the sex, color, and condition, whether single or married, age, occupation, place of death, place of birth, names and birthplace of parents, disease or cause of death, and the time of recording, so far as can be ascertained.

SEC. 4. Every meeting of the Society of Friends, clergymen, and all others authorized to join persons in marriage, shall make a faithful record of every such rite performed by them, in manner and form aforesaid, and return the same for the last preceding month, on or before the second Monday of every month, to the town clerk of the town in which such rite shall have been performed; and no marriage shall be solemnized until the parties shall have signed and delivered to the person about to solemnize it, or to a clerk of a meeting of the Society of Friends, a certificate containing the information required for the record of a marriage, as prescribed by this chapter.

SEC. 5. The town clerk of every town shall annually, in the month of January, collect the information required by this chapter, in relation to all children born in the town during the year ending on the thirty-first day of December next preceding.

SEC. 6. Physicians and midwives shall, on or before the fifth day of each month, report to the clerk of each city or town a correct list of all children born therein during the month next preceding, at whose birth they were present, stating the date and place of each birth, the name of the child if it has any, the sex and color of the child, the name, place of birth and residence of the parents, and the occupation of the father. The fee of the physician or midwife shall be twenty-five cents for each birth so reported, and shall be paid by the city or town in which the report is made.

SEC. 7. Whenever any person shall die, or any still-born child shall be brought forth in this state, the physician attending at such bringing forth

or last sickness, if any physician so attended, shall, within forty-eight hours after such death or bringing forth, leave with the family, if any, or person having the care of the deceased, or the person bringing forth such still-born child, or give to the undertaker or person who conducts the funeral, a certificate stating, in case of a death, the name of the deceased, the date of the death, and the disease or cause of the death; and in case of the bringing forth of a still-born child, the date and the cause of such child being brought forth still-born: *Provided, however*, that if the physician last in attendance shall not have knowledge of such death, or is otherwise reasonably prevented from leaving with the family or giving the undertaker such certificate within the time hereinbefore specified, or before the funeral or disposal of the remains of the deceased, he shall, within five days after having knowledge of such death by notification or otherwise, send to the town or city clerk or registrar of the town or city in which such death occurred a certificate, stating the name, date, and disease or cause of death of such decedent.

SEC. 8. Every town council may appoint a sufficient number of persons to act as undertakers, removable at the pleasure of such council.

SEC. 9. No undertaker or other person shall conduct a funeral, or bury or deposit in a tomb, or remove from this state or otherwise dispose of the remains of any deceased person or still-born child, unless he shall first obtain the physician's certificate required by section seven of this chapter, if a physician was in attendance upon such person who has deceased or the person bringing forth such still-born child, and shall return the same, together with his own certificate of the information required by section three of this chapter, to the town clerk of the town where such death or bringing forth took place: *Provided, however*, that in such towns as allow the burial or removal of bodies of deceased persons without a permit from the town clerk, and if the undertaker or other person who has charge of the disposal of the remains of the deceased person is unable to obtain the said physician's certificate, after reasonable attempts therefor, before the burial or removal of the said remains, then the said undertaker or other person shall make his return as required by section three of this chapter, including the cause of death and the name of the physician last in attendance upon the deceased, immediately to the town or city clerk or registrar of the town or city in which the death occurred. He shall, also, within two days thereafter, notify the physician last in attendance upon the deceased person of the name and date of death of the same.

SEC. 10. Clergymen of all denominations who officiate at the funerals of decedents when no undertaker is in attendance shall, when requested by the state registrar, or the town or city clerk or registrar of the town or city in which such deaths occurred, make returns of such deaths in the same manner and with the same compensation as undertakers.

SEC. 11. Any town may make ordinances more effectually to attain the objects herein contemplated.

SEC. 12. The town clerks, or persons appointed as aforesaid, shall receive for each record of a death made and returned as required by law, and for each record of a marriage made and returned as required by law, twenty cents, to be paid to them out of their respective town treasuries: *Provided*, that the yearly compensation to be paid out of the town treasury as aforesaid, to any one town clerk or person appointed as aforesaid, who shall perform the duties prescribed by this chapter, shall not be less than five dollars. Undertakers and others making returns of deaths, as required by sections seven and nine of this chapter, shall receive for each full report of a death made to the town clerk, five cents in the cities of Providence and Newport, and ten cents in the other towns of the state.

SEC. 13. Every clergyman, physician, midwife, undertaker, town clerk, clerk of any meeting of the Society of Friends, or other person who shall willfully or unreasonably neglect or refuse to perform any of the duties imposed on or required of him by this chapter, shall be fined not exceeding twenty dollars nor less than two dollars for each offence, one-half thereof to the use of the town in which the offence shall occur, and one-half thereof to the use of the person who shall complain of the same.

SEC. 14. Every clergyman, physician, coroner, undertaker, medical examiner, or clerk of any meeting of the Society of Friends, shall cause his name, residence, and post-office address to be recorded in the town clerk's office of the town where he resides.

SEC. 15. No letters of administration or letters testamentary shall be granted by any court of probate upon the estate of any person, until the death of such person, or the facts from which the same is presumed, shall be duly certified, as near as may be, to the town clerk, in order that the same may be duly registered according to the provisions of this chapter.

SEC. 16. The town and city clerks, and registrars of the several towns and cities, shall have the custody of all records of births, deaths, and marriages of their respective towns, whether made under the statutes now in force or any former statute, and a certificate signed by them, certifying that any written or printed statement of any marriage, birth, or death is a true copy of the record in their custody, shall be admitted as evidence of such marriage, birth, or death.

SEC. 17. Births, marriages, and deaths of non-residents shall be distinguished from those of residents in the returns by being arranged separately.

SEC. 18. The secretary of the state board of health may from time to time vary the forms of returns, and require such additional information as he may consider necessary to accomplish the object of this chapter.

SEC. 19. The town clerks or other officers appointed under this chapter to collect, record, and return the births in the several cities and towns, shall receive fees therefor as follows: For making record and return of

these facts as required by law, twenty cents for each entry and return; to be paid by the city or town in which the birth is recorded.

SEC. 20. The clerk or registrar of each town and city shall, on the first day of each and every month, make a certified copy of all births, marriages, and deaths recorded in the books of said town or city during the previous month, whenever the parents of the child born, or the bride or the groom, or the deceased person, were resident in any other town or city in this state, or in any other state, at time of said birth, marriage, or death; and shall transmit such certified copies to the clerk or registrar of the town, city, or state in which such parents of the child born, the bride or the groom, or the deceased, were resident at the time of said birth, marriage, or death, stating, in case of a birth, the name of the street and number of the house, if any, where such parents resided, the place of birth of such parents, and the maiden name of the mother, whenever the same can be ascertained; and the clerk or registrar so receiving such certified copies shall record the same in the books kept for recording births, marriages, and deaths. Such certified copies shall be made upon blanks to be furnished for that purpose by the secretary of the state board of health.

SEC. 21. The town clerks of the several towns, or other persons appointed under this chapter to collect the births in the several towns, shall annually in the month of January collect the facts concerning the births within their respective towns, required by this chapter, and shall, so far as practicable, at the same time collect the names of all persons liable to be enrolled in the militia, as required by title thirty-four, and the census of all persons between the ages of five and fifteen years inclusive, as provided by chapter fifty-four, and shall receive therefor such compensation as the town council or the board of aldermen of their respective cities shall determine: *Provided*, that the city of Providence shall be exempt from so much of the provisions of this section as relates to the collection of the statistics of births.

SEC. 22. Blanks for the foregoing purposes shall be furnished, on application therefor, on or before the first day of December in the year preceding, by the state board of health for the collection of births, by the adjutant-general for the taking of the enrolled militia, and by the commissioner of public schools for the census aforesaid.

SEC. 23. The person or persons who shall discharge the duties required by section twenty-one of this chapter, if other than the town clerk, shall make full return thereof to the town clerk of his or their town, on or before the tenth day of February next following.

SEC. 24. The returns required to be made by the clerks of the appellate division of the supreme court, in relation to divorces, to the secretary of the state board of health, or a prepared abstract thereof, shall be published in the annual report of the births, marriages, and deaths in the state.

SYNOPSIS OF THE LAW OF MARRIAGE.

GENERAL LAWS, CHAPTER 191.

SECTIONS 1, 2, and 3 show what kindred persons cannot marry, and declare marriages within prohibited degrees null and void.

SECTION 4 makes an exception in favor of Jews, within the degrees of affinity or consanguinity allowed by their religion.

SECTION 5 declares the marriage of persons having a husband or wife living, and of idiots and lunatics, absolutely void.

SEC. 6. Any minister or elder of any religious denomination who shall be *domiciled* in the state, and shall have *registered* with the town clerk and have received a *license*, may join persons in marriage in this state.

SECTION 7 designates who shall be considered as belonging to a religious denomination within the meaning of the preceding section.

SEC. 8. Wardens in the town of New Shoreham may join persons in marriage in said town.

SECTION 9 designates who may join persons in marriage when solemnized among Quakers, or among persons professing the Jewish religion.

SEC. 10. Persons intending to be joined together in marriage in this state must first obtain a license from the town or city clerk of the town in which they respectively reside, or, if not residents of the state, from the clerk of the town or city in which the marriage is to be solemnized. The license shall contain the information called for so far as the same is known to such persons, each of whom shall subscribe to the truth of the same in the presence of the clerk or an assistant clerk of that town or city in which they respectively reside. For issuing such license the town or city clerk shall be entitled to a fee of one dollar: *Provided*, that when the persons intending to be joined in marriage live in different towns or cities in this state the fee shall be fifty cents in each town or city. Such license shall be presented to the minister, elder, justice, warden, or other person who performs the marriage ceremony.

SECTION 11 provides for the control of marriages of minors, and requires the written consent of the parent or guardian before the information provided for in section ten can be given. Persons over eighteen years of age, however, who may have no parent or guardian, may make oath relative to that fact to the city or town clerk, and may then give the required information called for in the application.

SECTION 12 requires that *each* of the persons married must present to the officiating clergyman a certified copy, as provided in section ten. These

must also be signed by the respective parties to the marriage in the presence of the clergyman. This is intended to identify the parties as being the same who appeared for the certificate from the town clerk.

SECTION 13 requires that the officiating clergyman shall endorse the certificate stating that he has joined the parties in marriage, and also that two witnesses of the marriage shall append their signatures. It also provides that the minister shall make a return of the certificate to the town clerk on or before the second Monday of the month succeeding the date of the marriage.

SECTION 14 provides for the care and preservation of the records.

SECTION 15 provides for the work of registration in the city of Providence to be done by the city registrar.

SECTION 16 provides for the recording of the returned certificates in the office of the town clerk, and the final lodgment of the certificates with the secretary of state. These are there to be properly indexed, and open to inspection only in the presence of some one connected with the office of the secretary of state.

SECTION 17 provides that two witnesses shall be present at the marriage ceremony.

SECTION 18 provides that lawful objection to a marriage shall be made in writing, and the officiating clergyman shall not proceed with the marriage until the objection is removed.

SECTION 19 provides for a penalty of six months imprisonment, or a fine of one thousand dollars, for joining persons in marriage without first having been presented with the certified copies required in section ten, or without having first returned any lawful objection to the marriage.

SECTION 20 provides for a penalty a fine of not exceeding one hundred dollars, for failure to perform any of the duties devolving upon the officiating officer under this chapter.

SECTION 21 provides for a fine for joining persons in marriage who have a husband or wife living.

SECTION 22 provides that no marriage shall be deemed or adjudged to be void by any failure on the part of the officiating officers to comply with the law, if the marriage is in other respects lawful and has been performed with a full belief on the part of the persons so married, or either of them, that they have been lawfully joined in marriage.

SEC. 23. Every person who shall solemnize a marriage without being legally authorized thereto shall be fined five hundred dollars.

GENERAL LAWS. CHAPTER 195.

OF DIVORCE.

SECTION 1. Divorces from the bond of marriage shall be decreed in case of any marriage originally void or voidable by law, and in case either party is for crime deemed to be or treated as if civilly dead, or from absence or other circumstances may be presumed to be actually dead.

SEC. 2. Divorces shall be decreed for impotency, adultery, extreme cruelty, willful desertion for five years of either of the parties, or for such desertion for a shorter period of time in the discretion of the court, for continued drunkenness, for the habitual, excessive, and intemperate use of opium, morphine, or chloral, for neglect or refusal on the part of the husband, being of sufficient ability, to provide necessaries for the subsistence of his wife, and for any other gross misbehavior and wickedness in either of the parties repugnant to and in violation of the marriage covenant.

SEC. 3. Whenever in the trial of any petition for divorce from the bond of marriage it shall be alleged in the petition that the parties have lived separate and apart from each other for the space of at least ten years, the court may in its discretion enter a decree divorcing the parties from the bond of marriage, and may make provisions for alimony.

SEC. 4. Whenever it shall appear that the absence, adultery, cruelty, desertion, or other cause of complaint as aforesaid was committed or occasioned by the collusion of the parties, and done and contrived with an intention to procure a divorce, in such case no divorce shall be decreed.

SEC. 5. Whenever a divorce is granted for fault on the part of the husband, the wife shall have dower as if the husband were dead; but such dower shall be claimed on proceedings begun within six months after the absolute decree, and, if not claimed within said period, or if claim be made for alimony within said period, then dower shall be deemed to be waived and released, and the only relief of the wife shall be a claim for alimony chargeable upon the estate of the husband, or some specific portion thereof as the court may decree: *Provided*, that in case of such divorce between parties married before the Digest of eighteen hundred forty-four went into operation, the wife shall be re-instated in all of her real estate, and have restored to her all of her personal estate not, in either case, disposed of at the date of the filing of the petition for said divorce.

SEC. 6. Whenever a divorce is granted for fault on the part of the wife, the husband, if he be entitled to curtesy-initiate, shall have a life estate in all the lands of the wife as if the wife were dead, but subject to such

allowance to the wife, to be charged on such life estate, as the court in the peculiar circumstances of the case may deem just and proper.

SEC. 7. Otherwise than as provided in the two preceding sections neither husband or wife, on divorce being granted, shall have any right in the estate of the other.

SEC. 8. Divorces from bed, board, and further cohabitation, until the parties be reconciled, may be granted for any of the causes for which by law a divorce from the bond of marriage may be decreed, and for such other causes as may seem to require the same. In case of such divorce the court may assign to the petitioner a separate maintenance out of the estate or property of the husband or wife, as the case may be, in such manner and of such amount as it may think necessary or proper.

SEC. 9. Every petition shall be signed by the petitioner, if of sound mind and of legal age to consent to marriage ; otherwise, upon application to the court, and after notice to the party in whose name the petition shall be filed, the court may allow such petition to be signed by a guardian or next friend.

SEC. 10. No petition for divorce shall be granted unless the petitioner shall at the time of preferring such petition be a domiciled inhabitant of this state, and have resided therein for the period of one year next before the preferring of such petition.

SEC. 11. All such petitions shall be filed, heard, and tried in Providence, unless the petitioner shall reside in the county of Newport or in the county of Washington, in which case such petition shall be filed, heard, and tried in Newport or South Kingstown respectively.

SEC. 12. The court may by general rule determine the return-day of petitions for divorce and prescribe the notice to be given, within or without the state, on all such petitions, and may issue such process as may be necessary to carry into effect all powers conferred upon it in relation to the same ; and said court may also, by general rule, fix the times, during its session, when all petitions for divorce shall be heard, as they may be filed in Providence, Newport, or South Kingstown, respectively. Such general rules shall, however, be subject to such special orders as the court may make in special cases. And, until general rules are made, special order in each case shall be made.

SEC. 13. Whenever any petition for divorce shall have been filed or be pending in the appellate division of the supreme court, and said court shall be of the opinion that sufficient notice of the pendency of said petition shall not, from any cause, have been given to the adverse party, said court may order notice or further notice to the adverse party to be given in such manner as the court may prescribe.

SEC. 14. The said court may regulate the custody and provide for the education, maintenance, and support of the children of all persons by them divorced or petitioning for a divorce, and all persons to whom a separate

maintenance may be granted or who may petition for the same ; may in its discretion make such allowance to the wife, out of the estate of the husband, for the purpose of enabling her to prosecute or defend against any such petition for divorce or separate maintenance, in case she has no property of her own available for such purpose, as they may think reasonable and proper ; and may make all necessary orders and decrees concerning the same, and the same may at any time alter, amend, and annul for sufficient cause, after notice to the parties interested therein.

SEC. 15. Any woman to whom a divorce from the bond of marriage is decreed may be authorized by such decree to change her name, subject to the same rights and liabilities as if her name had not been changed.

SEC. 16. After the filing and during the pendency of any petition for divorce the said court may make such interlocutory decrees and grant such temporary injunctions as may be necessary until a hearing can be had before said court.

GENERAL LAWS. CHAPTER 225.

OF DIVORCES.

SECTION 9. The clerks of the appellate division shall make returns to the secretary of the state board of health, on or before the first day of March in each and every year, for the year ending on the thirty-first day of December preceding, of all the applications for divorce, showing the number of applications, the number thereof continued, the number granted, and the causes for which the same are granted, but without the names of the parties, in accordance with the blanks which shall be furnished them by the secretary of state.

GENERAL LAWS. CHAPTER 287.

OF MEDICAL EXAMINERS AND CORONERS.

SECTION 1. The governor shall appoint, in each county, able and discreet men, learned in the science of medicine, to be medical examiners in such county.

SEC. 2. The number of medical examiners appointed as provided in the preceding section shall be as follows :

For the county of Washington five examiners, one in each of the five following districts, viz.: District one, composed of the town of Westerly ; district two, of the town of South Kingstown ; district three, of the town

of Hopkinton; district four, of the towns of North Kingstown and Exeter; district five, of the towns of Charlestown and Richmond.

For the county of Kent two examiners, one in each of the two following districts, viz.: District one, composed of the towns of West Greenwich and Coventry; district two, of the towns of East Greenwich and Warwick.

For the county of Providence eleven examiners, one in each of the first nine following districts, and in district ten two examiners, viz.: District one composed of the towns of Scituate and Foster; district two, of the towns of Cranston and Johnston; district three, of the town of Glocester; district four, of the towns of Smithfield and North Providence; district five, of the towns of Burrillville and North Smithfield; district six, of the city of Woonsocket; district seven, of the town of Cumberland; district eight, of the cities of Pawtucket and Central Falls and the town of Lincoln; district nine, of the town of East Providence; district ten, of the city of Providence.

For the county of Bristol, two examiners, one in each of the following districts, viz.: District one, composed of the towns of Barrington and Warren; and district two, of the town of Bristol.

* The number of medical examiners for the county of Newport shall be five, one in each of the first three districts and two in district four; and said districts shall be composed as follows: District one, of the towns of Tiverton and Little Compton; district two, the town of Portsmouth; district three, the town of New Shoreham; district four, the city of Newport and the towns of Middletown and Jamestown.

SEC. 3. If either of the medical examiners shall, at any time, from any cause, be unable to perform the duties of his said office, or shall be deemed by the attorney-general for any cause disqualified therefor, a medical examiner from an adjoining district may be called upon to perform them.

SEC. 4. Every medical examiner shall hold his office for the term of six years, and until another is appointed and qualified to act in his place, unless sooner removed by the appointment of some other person to fill his place.

SEC. 5. Every medical examiner shall, within thirty days after his appointment, and before entering upon the duties of his office, give bond with surety to, and to the satisfaction of, the general treasurer in the sum of one thousand dollars for the faithful performance of his duties.

SEC. 6. If the condition of any such bond be broken, to the injury of any person, actions may be brought upon such bond as upon the official bonds of sheriffs.

SEC. 7. Medical examiners shall make examinations as hereinafter provided, upon bodies of such persons only as are supposed to have come to their death by violence: *Provided*, that in case any prisoner in the state

* As amended April 16, 1896.

prison or in any county jail dies while so imprisoned, it shall be the duty of the medical examiner of the district in which such prison or county jail is situated, upon being notified of the death of such prisoner, to make at once an examination upon the body of such deceased prisoner.

SEC. 8. When a medical examiner has notice that there has been found, or is lying, within his district the body of a person who is supposed to have come to his death by violence, he shall forthwith repair to the place where such body lies and take charge of the same; and if, on view thereof and personal inquiry into the cause and manner of the death, he deems a further examination necessary, he shall, upon being thereto authorized in writing by the attorney-general, or by the mayor of the city or president of the town council of the town where such body lies, make an autopsy in the presence of two or more discreet persons as witnesses, and shall then and there carefully reduce, or cause to be reduced, to writing every fact and circumstance tending to show the condition of the body and the cause and manner of death, together with the names and addresses of said witnesses, which record he shall subscribe. Before making such autopsy he shall call the attention of the witnesses to the position and appearance of the body.

SEC. 9. Should the medical examiner deem it advisable to have present a physician as one of the witnesses as aforesaid, such physician shall also subscribe the record made by the medical examiner, and for such service he shall receive a compensation of five dollars.

SEC. 10. Town councils shall select a suitable person to act as coroner for their respective towns, to hold his office for three years and until another is elected and qualified to act in his place, unless sooner removed by the election of some other person to fill his place.

SEC. 11. The coroners so elected shall have exclusive jurisdiction as coroners in their respective towns.

SEC. 12. The coroner shall appoint in writing, under his hand and seal, one or more discreet persons to act as his deputy in case of his absence or inability to act, who shall have all the powers of a coroner, and be subject to like pains and penalties, for malfeasance in office; and the coroner shall file a copy of the appointment in the town clerk's office of his town.

SEC. 13. The coroner may suspend or discharge a deputy. The suspension or discharge of a deputy shall be in writing, addressed to the deputy; and the coroner shall forthwith file a duplicate thereof in the town clerk's office of his town.

SEC. 14. Every coroner and deputy coroner shall, before entering upon the duties of his office, take the engagement prescribed in section five of chapter twenty-five.

SEC. 15. Whenever the coroner has notice that there is in his town any person who has been injured by the criminal act, omission, or carelessness of another, and that said person believes that his death is impend-

ing from such injury, said coroner may take the statement of such person concerning the manner in which, and the person by whom, such injury was inflicted; and the statement so taken shall be reduced to writing and, if practicable, in the presence of the injured person.

SEC. 16. If, upon such view, personal inquiry, or autopsy, the medical examiner is of the opinion that the death was caused by the act or neglect of some person other than the deceased, he shall at once notify the attorney-general, and coroner of the town where the body was found, or in which it lies, and shall file a duly attested copy of the record of his autopsy, or view, with the said coroner and a like copy with the attorney-general; and shall in all cases certify to the officer having the custody of the records of deaths in the town in which the deceased came to his death, the name and residence of the person deceased, if known, or, when the name and residence cannot be ascertained, a description of the deceased, as full as possibly may be, for identification, together with the cause and manner by and in which he came to his death.

SEC. 17. The coroner shall thereupon hold an inquest, which may be private; in which case any or all persons, other than those required to be present by the provisions of this chapter, may be excluded from the place where such inquest is held, and such coroner may also direct the witnesses to be kept separate so that they cannot converse with each other until they have been examined. The attorney-general, or some person designated by him, may attend the inquest and examine all witnesses; and the coroner shall cause the testimony to be reduced to writing and signed by the witnesses. The attorney-general may, if he deem it necessary or expedient, direct an inquest to be held in the case of any casualty from which the death of a person results.

SEC. 18. The coroner may issue summons for witnesses, returnable before him. The persons served with such process shall be allowed the same fees, their attendance may be enforced in the same manner, and they shall be subject to the same penalties, as if served with a summons in behalf of the state in a criminal prosecution pending before a district court.

SEC. 19. The coroner shall, after hearing the testimony, draw up and sign a report, in which he shall find and certify when, where, and by what means the person deceased came to his death; his name, if known, and all material circumstances attending his death; and if it appears that his death resulted wholly or in part from the unlawful act of any other person, he shall further state the name of such person, if known to him, and he shall file such report, and the testimony by him taken, together with a copy of the record of the autopsy or view, in the office of the clerk of the court wherein an indictment for the offence may be found.

SEC. 20. The coroner shall bind such witnesses as he deems necessary, or as the attorney-general may designate, by recognizance in a reasonable sum, with sufficient surety, to personally appear, at such time as the

coroner may designate, at the district court of the district wherein the inquest is held, and not depart therefrom until discharged by said court; and if any such witness shall refuse to recognize as aforesaid, the coroner shall commit such witness to the jail in the same county, there to remain until he shall so recognize or be otherwise discharged according to law.

SEC. 21. If the report of the coroner shall state that the death was caused by the unlawful act or by the gross carelessness of any other person, and by whose act the same was committed, he shall immediately make a complaint thereof against the person accused, in writing and on oath, to the justice or clerk of the district court in the district where the offence was committed, to the intent that the person killing or being in any way criminally instrumental to the death may be apprehended; but nothing herein contained shall be so construed as to prevent complaint being made at any time before the finding of the report. And the coroner shall forthwith, in writing, notify the attorney-general of the complaint aforesaid, that he may appear by himself or some person appointed by him, at the examination, and prosecute the complaint in behalf of the state.

SEC. 22. If a medical examiner reports that a death was not caused by the act or neglect of some person other than the deceased, and the attorney-general is of a contrary opinion, the attorney-general may, notwithstanding such report, direct an inquest to be held in accordance with the provisions of this chapter; at which inquest he, or some other person designated by him, shall examine all the witnesses.

SEC. 23. The medical examiner may, if he deem it necessary, employ a chemist to aid in the examination of the body, or of substances supposed to have caused or contributed to the death; and such chemist shall be entitled to such compensation for his services as the medical examiner certifies to be just and reasonable, the same being audited and allowed in the manner hereinafter provided.

SEC. 24. When a medical examiner views or makes an examination of the dead body of a stranger, he shall cause the body to be decently buried; and if he certifies that he has made careful inquiry, and that to the best of his knowledge and belief the person found dead is a stranger, having no settlement in any town of the state, his fees, with the actual expense of burial, shall be paid from the general treasury. In all other cases the expense of the burial shall be first paid by the town wherein the body is found, and such town may recover the money so paid from the town where such person last had a settlement: *Provided, however*, that the general treasurer, or any town, ultimately paying any such burial expenses, shall have the right to recover such burial expenses from the estate of the deceased person.

SEC. 25. When services are rendered in bringing to land the dead body of a person found in any of the harbors, rivers, or water of the state, the medical examiner may allow such compensation for such services as he

deems reasonable; but this provision shall not entitle any person to compensation for services rendered in searching for a dead body.

SEC. 26. In all cases arising under the provisions of this chapter, the medical examiner shall take charge of any money or other personal property of the deceased, found upon or near the body, and shall deliver the same to the person entitled to its custody or possession; or if not claimed by such person within sixty days, then to an administrator, to be administered upon according to law.

SEC. 27. A medical examiner who fraudulently neglects or refuses to deliver any such property within three days, after demand upon him therefor, shall be imprisoned not exceeding two years or be fined not exceeding five hundred dollars.

SEC. 28. The fees of coroners shall, for the services specified in this chapter, be as follows, namely: For receiving and filing a duly attested copy of the record of an autopsy, fifty cents; for every page of two hundred words of written testimony, thirty cents; for each day's attendance in holding the inquest, five dollars; for the recognizance of witnesses, thirty-five cents; and for drawing up and filing a report in court, five dollars. Said fees having been audited by the state auditor, upon certificate of the attorney-general, shall be paid by the general treasurer.

SEC. 29. Each medical examiner shall receive fees as follows: For a view without an autopsy, four dollars; for a view and an autopsy, thirty dollars; and for travel, at the rate of ten cents a mile to the place of view. He shall also have power, in case of an autopsy, to employ a clerk at an expense not exceeding three dollars per day for each day's actual service.

SEC. 30. Every medical examiner shall return an account of the expenses of each view or autopsy, including his fees, to the state auditor, and shall annex to his return the written authority under which the autopsy was made. The state auditor shall audit such account and certify to the general treasurer what items in such account are deemed just and reasonable, and such items shall be paid by said treasurer to the persons entitled to receive the same.

SEC. 31. Medical examiners shall, in the books provided by the secretary of state, keep a record of all views of bodies found dead, together with their view and autopsy reports, and, on the first of January, April, July, and October, shall forward to the secretary of the state board of health attested copies of such records of views, together with the view reports and conclusions from autopsies. Should the commission of service of a medical examiner expire before the end of a quarter, the said examiner shall at once forward to the said secretary of the state board of health the records and reports of all cases unreported at date of expiration of said service.

SEC. 32. For each and every copy of said records and reports forwarded to the said secretary of the state board of health, medical examiners shall

receive twenty-five cents, which shall be paid by the state upon the voucher of said secretary of the state board of health that such copy of reports and records have been received by him.

SEC. 33. The secretary of the state board of health shall cause the returns received by him for each year, in accordance with this chapter, to be bound together with an index thereto; the state registrar shall prepare or cause to be prepared from the said returns such tabular results as will render them of practical utility, and shall make report thereof annually in connection with the report of births, marriages, and deaths required by chapter one hundred.

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